## UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

ZF MERITOR LLC and MERITOR TRANSMISSION CORPORATION,	
Plaintiffs,	) Civil Action No. 06-623-SLR
v.	) REDACTED PUBLIC VERSION
EATON CORPORATION,	)
Defendant.	)

### DEFENDANT'S MEMORANDUM OF LAW IN SUPPORT OF ITS MOTION TO EXCLUDE DERAMUS TESTIMONY

#### **VOLUME I – EXHIBITS 1 – 7**

### **VOLUME II – EXHIBITS 8 - 20**

OF COUNSEL:
Joseph A. Ostoyich
Erik T. Koons
William C. Lavery
Evan A. Young
BAKER BOTTS LLP
1299 Pennsylvania Avenue, NW
Washington, DC 20004
(202) 639-7700

Donald E. Reid (#1058) MORRIS, NICHOLS, ARSHT & TUNNELL LLP 1201 N. Market Street P.O. Box 1347 Wilmington, DE 19899 (302) 351-9219

Theodore B. Olson Thomas G. Hungar GIBSON, DUNN & CRUTCHER LLP 1050 Connecticut Avenue, N.W. Washington, DC 11101 (202) 955-8500

Attorneys for Defendant Eaton Corporation

Original Filing Date: March 25, 2013 Redacted Filing Date: April 1, 2013

# EXHIBIT 8

## IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

ZF Meritor LLC and	)	
Meritor Transmission Corporation	)	
Plaintiffs,	) )	Civil Action No. 06-623-SLR
V.	)	
	Ś	
Eaton Corporation	)	
Defendant.	)	

**Expert Report of David S. Sibley** 

#### I. Introduction

#### A. Qualifications

- 1. My name is David S. Sibley. I am the John Michael Stuart Centennial Professor of Economics at the University of Texas at Austin. In October 2004, I completed an eighteenmonth term as Deputy Assistant Attorney General for Economic Analysis in the Antitrust Division of the U.S. Department of Justice, the highest-ranking economics position within the Division. In this capacity, I supervised all economic analysis within the Antitrust Division and directed its Economic Analysis Group. As Deputy Assistant Attorney General, I also contributed to the economic analysis of general policy issues and represented the United States in Organization for Economic Cooperation and Development discussions.
- 2. For the last thirty years, I have carried out extensive research in the areas of industrial organization (a field of economics that examines the behavior of firms and the structure of markets), microeconomic theory, and regulation. My publications have appeared in a number of leading economic journals, including the Journal of Economic Theory, Review of Economic Studies, Rand Journal of Economics, American Economic Review, Econometrica, and the International Economic Review, among others.
- 3. I hold a Ph.D. in economics from Yale University and a B.A. in economics from Stanford University. Additional details regarding my qualifications and experience are given in my curriculum vitae, a recent copy of which is attached to this report as Appendix One.

#### B. Assignment

4. I have been asked by counsel representing Eaton Corporation ("Eaton"), to examine, from an economic perspective, claims made by plaintiffs ZF Meritor LLC ("ZF Meritor") and Meritor Transmission Corporation ("Meritor") regarding antitrust injury and

alleged damages.<sup>1</sup> In doing so, I respond to the expert report of Dr. David W. DeRamus.<sup>2</sup> That report references a paper I co-authored pertaining to the economic analysis of loyalty rebates. I have also been asked to address the relevance of that paper to the issues in this case.

- 5. As part of my investigation into plaintiffs' claims, I (or my staff working under my direction) have considered a number of documents and other sources of information. The materials I reviewed include, but are not limited to, the following: (1) the complaint; (2) documents and databases produced in discovery; (3) publicly available data and information regarding heavy-duty transmissions; (4) academic publications regarding economic issues relevant to this proceeding; (5) depositions of Eaton and ZFM personnel; and (7) the expert report and supporting documentation of Dr. DeRamus. Appendix Two provides a detailed list of the material I considered in the preparation of this report.
- 6. I am being compensated at an hourly rate of \$600, and my compensation is not contingent on the outcome of this proceeding. My research into the matters discussed above continues, and I reserve the right to modify or supplement my opinions as additional information becomes available.
  - *C. Summary of Conclusions*
- 7. Based on my analysis to date, I conclude that ZFM sustained no antitrust-related impact or injury from Eaton's allegedly anticompetitive actions. I conclude this for the following reasons.
  - ZFM could have sold more transmissions than it did without causing Freightliner, International, or Paccar to lose any rebates from Eaton.

<sup>&</sup>lt;sup>1</sup> I refer to ZF Meritor and Meritor collectively as "ZFM" or plaintiffs.

<sup>&</sup>lt;sup>2</sup> Expert Report of David W. DeRamus, Ph.D., ZF Meritor LLC and Meritor Transmission Corporation v. Eaton Corporation (Feb. 17, 2009 (hereinafter "DeRamus Report").

- Had ZFM's costs been as low as Eaton's, ZFM could have profitably undercut Eaton's prices, including rebates and competitive equalization payments (a.k.a. "SPIFF" payments).
- Dr. DeRamus attempts to link anticompetitive actions by Eaton to price increases by noting that gross prices for certain transmissions rose in 2005 and 2006. However, the only economically correct way to infer market power from price changes is to take into account contemporaneous cost changes. Adjusting prices for cost changes, I find no systematic increase.
- 8. I have analyzed damages assuming that the plaintiffs can prove liability. Therefore, I have assumed a but-for world in which Eaton's allegedly anticompetitive conduct is not present. In the but-for world there are no long term agreements ("LTAs") between Eaton and its customers (i.e. original equipment manufacturers ("OEMs") of trucks) that involve share-based rebates from Eaton to the OEMs. I also have analyzed the but-for world(s) assumed by Dr. DeRamus. I have reached the following conclusions regarding damages.
  - ZFM would not have been financially viable in the but-for world. Therefore, damages are zero.
  - In the liability portion of his report, Dr. DeRamus asserts that Eaton's conduct reduced competition and caused transmission prices to rise. However, in his damages analyses, Dr. DeRamus assumes the opposite: in the but-for world without Eaton's allegedly anticompetitive conduct, transmission prices would have been the same or higher. His approach does not provide an economically sensible methodology with which to estimate damages.
  - Dr. DeRamus provides no economically meaningful analysis that supports a conclusion that the conduct he identifies as anticompetitive was the source of any diminution in ZFM's sales, share, or profits. Moreover, if any individual element of conduct (or group of elements) is found to be unlawful, his damage methodology is not capable of isolating the effects of specific act(s).
  - Dr. DeRamus presents five alternative estimates of the present value of ZFM's lost profits during the period July 2000 through February 2009. I find that these methods are not based on sound economic logic and analysis for (at least) three reasons. First, ZFM's but-for prices for manual transmissions are substantially higher than the prices actually charged by Eaton. Thus, according to Dr. DeRamus, a more competitive market for manual transmissions in the but-for world would result in higher prices, not lower prices. This makes no economic sense. Second, his analysis rests largely

on the notion that the but-for world is adequately characterized by a business plan developed by ZFM's management in November 2000. However, he offers no details on the analysis or modeling assumptions ZFM relied upon in the plan. Third, he attributes the entire difference between the plan's forecast and ZFM's actual sales (adjusting for Class 8 truck builds) to the alleged conduct, without controlling for other factors that may have caused the company's plan not to be realized.

- Dr. DeRamus develops an econometric model to forecast ZFM's share of Class 8 truck builds, but that model is not economically meaningful because it fails to include any of the important determinants of ZFM's share, such as the relative prices of ZFM and rival products, the perceived product quality of ZFM's product versus competitive alternatives, and ZFM's ability to offer a full product line, among others.
- Assuming, *arguendo*, that Dr. DeRamus' econometric method provided an appropriate basis to measure damages (which it does not), I implemented that framework but using a more relevant measure of ZFM's share, i.e., ZFM's share of the combined manual and automated transmissions sold by ZFM and Eaton. Data available to determine this share was first available in October 1995, so I estimated my econometric model starting from that date. Applying this revision to Dr. DeRamus' model reduces his estimate of the present value of lost profits from approximately \$390 million to approximately \$33 million (using his risk-free interest rate). However, this method also implies that ZFM would not have been economically viable in the but-for world because of its small scale of operations. Therefore, unless we assume that ZFM could operate viably at an uneconomic scale of operations, damages again are zero.
- Finally, assuming, *arguendo*, that Dr. DeRamus' method of estimating ZFM's lost enterprise value is economically valid (which it is not), he still errs in his estimate. He claims that ZFM's lost enterprise value equals \$304 million in the but-for world. Using his flawed approach, the correct estimate is \$117 million. I do not endorse the \$117 million as an appropriate measure of lost enterprise value because it is based on Dr. DeRamus' flawed methodology for calculating ZFM's but-for profits. Under the more likely outcome that ZFM is not financially viable in the but-for world, there is no lost enterprise value as of February 2009.

#### D. Outline of Report

9. Section II provides a summary of the heavy-duty transmission industry. Section III presents my economic analysis of Dr. DeRamus' claims regarding antitrust injury to ZFM as a result of Eaton's allegedly anticompetitive actions. Section IV contains my economic analysis of Dr. DeRamus' damages claims.

#### II. RELEVANT BACKGROUND ON HEAVY-DUTY TRANSMISSIONS

#### A. Characteristics of Heavy-Duty Transmissions

10. A transmission is a mechanism located between the engine's crankshaft and the drive shaft of a vehicle. Its function is to transfer energy efficiently from the engine to the wheels. A vehicle's engine turns a crankshaft, delivering the power that is used to operate the vehicle. Engines operate most efficiently within a relatively narrow range of revolutions per minute ("RPM"). The transmission helps convert this relatively narrow range of crankshaft RPMs to a far wider range of drive shaft RPMs, permitting the vehicle to be operated efficiently at a relatively wide range of speeds.

11. Transmissions accomplish this task in a variety of ways.<sup>3</sup> Manual transmissions use gears with different gear ratios to link the engine's crankshaft to the driveshaft. A clutch is used to disengage the crankshaft from the driveshaft, and the driver selects a gear at which an efficient RPM for the engine matches the RPM of the drive shaft, given the vehicle's speed. The clutch is then released to engage the gears, transferring power from the engine to the wheels. Vehicles with manual transmissions typically have three pedals: one each for the clutch, the brake, and gas. Other transmission systems include automatic transmissions, automated manual transmissions, and continuously variable transmissions. Automatic transmissions dispense with the clutch and simplify the process of changing gears. Because there is no clutch, these transmissions require the vehicle to have only two pedals. Automatic transmissions are somewhat easier to operate than are manual transmissions and require less skilled drivers. There is a mechanical clutch in some 3-pedal automated manual transmissions, e.g., the AutoShift. Automated manual transmissions contain a clutch that is activated by actuators and electronic

<sup>&</sup>lt;sup>3</sup> Chao-Hsu Yao, "Automotive Transmissions: Efficiently Transferring Power from Engine to Wheels," ProQuest Discovery Guides, Released January 2008.

controls, thus freeing the driver from depressing a clutch pedal. Automated manuals can be operated in automated mode, which does not require the driver to shift gears, or in manual mode, in which case the driver uses a lever to shift gears. Continuously variable transmissions based on pulleys and belts have been used less frequently than the other types of transmissions.

- 12. Transmissions vary in two other dimensions: the torque rating and the number of gears and their ratios. Heavier vehicles or those that operate in rough terrain require greater torque (roughly, the engine's ability to turn the crankshaft) than lighter vehicles or those operated on well-maintained roads. Transmissions for the former category (i.e., the heavier vehicles or the ones operated in rough terrain) require a higher torque rating than transmissions for the latter category.
- 13. Vehicles that operate over long routes at relatively constant speeds require fewer gears (such as 9 and 10-speed transmissions) than the 13- to 18-speed transmissions that may be required by trucks serving in some off-road operations. Some off-road uses may require a wide range of low gears, which transfer a great deal of power to the wheels, but do not permit high-speed travel. Low-speed transmissions are also useful for garbage trucks that creep forward to pick up dumpsters.
- 14. Trucks are classified into eight categories based on their Gross Vehicle Weight Rating ("GVWR"), i.e., their fully loaded weight. Class 8 vehicles are the heaviest and most powerful trucks, with a GVWR greater than 33,000 pounds. According to Christopher Konkel, at Eaton "[t]here's what we call medium heavy classification which may go up to 56,000. We typically look at heavy duty as over 56,000 or greater, but there's a lot of crossovers within those

vehicle ranges once you get to medium heavy, heavy classification." Class 8, a well-defined category, is not uniformly viewed as "heavy duty."

15. According to a presentation prepared by Meritor,<sup>5</sup> transmissions for Class 8 trucks can be divided into three segments. The *linehaul* segment uses 9-, 10-, and 13-speed transmissions, with torque ratings between 1150 lb-ft to 1850 lb-ft. The *vocational* segment uses LL, 13-, and 18-speed transmissions, with a torque range of 1150-2050 lb-ft. The *specialty* segment consists of military vehicles, motor homes, construction equipment, fire engines, garbage trucks, and other such vehicles. According to the presentation, 10-speeds make up about 53 percent of the heavy-duty segment, 9-speeds constitute about 15 percent, vocational transmissions are about 10 percent, 13-speeds are about 9 percent, 18-speeds are about 5 percent, and 15-speeds have about 2 percent.<sup>6</sup> Eaton employs a somewhat different classification, categorizing transmissions as performance, vocational, automated, or fleet products.<sup>7</sup> Linehaul transmissions "fit into both fleet and performance" categories.<sup>8</sup> John Buck of Eaton stated that he considers heavy-duty trucks to be the same as Class 8 trucks.<sup>9</sup>

#### B. Suppliers of Heavy-Duty Transmissions

During the relevant period, suppliers of HD transmissions in the U.S. included Eaton, Meritor, ZF, ZF Meritor (a joint venture of ZF and Meritor), Allison Transmissions ("Allison"), Transmission Technologies Corporation ("TTC"), and Mack Trucks ("Mack").

<sup>&</sup>lt;sup>4</sup> Deposition of Christopher Konkel, November 21, 2008, 8:2-6.

<sup>&</sup>lt;sup>5</sup> Meritor, Product Presentation, ZFMA0198240-60, at '241. For a slightly different categorization, see Deposition of Richard Decaire, September 30, 2008, 30:16 - 31:11.

<sup>&</sup>lt;sup>6</sup> Meritor, Product Presentation, ZFMA0198240-60, at 246.

<sup>&</sup>lt;sup>7</sup> Deposition of Giap Nguyen, January 28, 2009, pp. 29-35, and Deposition of Dwight Dennis Simpson, October 7, 2009, pp. 28-31.

<sup>&</sup>lt;sup>8</sup> Deposition of Dwight Dennis Simpson, October 7, 2009, 30:15-16.

<sup>&</sup>lt;sup>9</sup> Deposition of John Buck, January 6, 2009, 5:7-11.

- 17. Eaton was established in 1911, and was initially known as the Torbensen Gear and Axle Company. In 1923, it changed its name to the Eaton Axle and Spring Co. <sup>10</sup> Eaton manufactures a wide range of products including heavy-duty truck transmissions. Meritor has its origins in the Timken Detroit Axle Co. which was formed in 1909. In 1997, Meritor was spun off to develop automotive products, including the Engine Synchro Shift transmission system. <sup>11</sup> Allison originated in the Indianapolis Speedway Team Company in 1915. <sup>12</sup> TTC is part of the DESC group, one of Mexico's largest automotive component suppliers. It is a joint venture of DESC's automotive operations and Dana Corporation. TTC produces manual transmissions, including transmissions for Class 8 commercial vehicles. <sup>13</sup>
- 18. Mack manufactures heavy-duty trucks, as well as engines, transmissions, and axles used in its trucks. Its Maxitorque transmission is available in 19 models ranging from 6 speeds to 18 speeds. Unlike the other firms discussed above, Mack is vertically integrated in heavy-duty transmissions and heavy-duty trucks.
- 19. According to a ZF Meritor Business Plan presented to its Board of Directors in July 2002, Eaton's sales volume of heavy-duty transmissions in 1999 was 219,346 units, or 68 percent of the total reported. ZFM's volume of 47,567 amounted to about 14 percent of the total, TTC's volume of 24,964 amounted to about 7.7 percent, proprietary volume was 24,294 or 7.5 percent of the total, and Allison's volume of 6,452 amounted to 2 percent of the total.

 $<sup>^{10}\</sup> See\ http://www.eaton.com/EatonCom/OurCompany/AboutUs/EatonHistory/index.htm.$ 

<sup>&</sup>lt;sup>11</sup> See http://www.arvinmeritor.com/about/history.asp

<sup>&</sup>lt;sup>12</sup> See http://www.allisontransmission.com/company/history/1910.jsp.

<sup>&</sup>lt;sup>13</sup>See http://www.ttcautomotive.com/English/aboutus/aboutus.asp.

20. In 2002, Eaton's volume fell to 111,411, just a little more than half its 1999 volume, and its share equaled 74.1 percent. The shares of the other firms were: ZFM at 11.4 percent, proprietary at 8.6 percent, TTC at 2.9 percent and Allison at 3 percent.

#### C. Direct and Indirect Purchasers of HD Transmissions

- 21. Eaton and other producers of transmissions sell their products to OEMs including Daimler Trucks North America ("DTNA") which sells the Western Star, Freightliner, and Sterling brands; PACCAR Inc. ("PACCAR") which owns the Kenworth and Peterbilt brands; International Truck and Engine Co. ("International"), the Volvo Group (which includes Mack), and Ford. Ford sold its Sterling heavy duty truck brand to Freightliner circa 1999.<sup>14</sup>
- 22. Large fleet owners may negotiate directly with OEMs, and sometimes rely on competitive bidding to keep prices low. Smaller fleets and individual owner-operators purchase trucks from dealers. OEMs maintain a data book with product descriptions and prices; these books are used by dealer salespeople to help configure trucks to meet their customers' specifications and arrive at a price for the configuration the customer wishes to purchase. Configurations that differ from the "standard position" could sell for a lower or higher price than the standard. End user customers often work with salespersons at the dealership to specify the components for the trucks they order. Accordingly, transmission manufacturers market their products to OEMs and also directly to the fleet owners and other groups who purchase trucks from OEMs.

<sup>&</sup>lt;sup>14</sup> Deposition of John Buck, January 6, 2009, 13:14 – 14:2.

<sup>&</sup>lt;sup>15</sup> Deposition of Dwight Dennis Simpson, October 7, 2008, 35:16 – 37:6.

#### D. Vertical Integration by OEMs

- 23. Eaton's 2007 Strategic Plan notes that "[t]he trend for OEMs to vertically integrate continues to expand globally." Reasons for this growth include the strategic importance of the drivetrain (including the transmission) in OEMs' ability to differentiate their products, control the aftermarket, reduce complexity for the end-user, greater control over product design, economies of scale, and leveraging OEMs' investments in intellectual property related to transmissions, engines, and other key components of trucks. OEMs that manufacture their own heavy duty Class 8 transmissions include Daimler in Europe and South America, Volvo, and Mack, which is now part of Volvo.
- 24. The ability of OEMs to vertically integrate creates a credible threat to transmission manufacturers. Indeed Mack is vertically integrated. The President of ZFM, Richard Martello, stated the he was concerned about vertical integration and Daimler.<sup>19</sup> Greg Sharp testified that his company repeatedly considered whether or not to vertically integrate using its German heavy duty transmission technology.<sup>20</sup> Even the threat of vertical integration may be effective in disciplining a transmission suppler, whether or not vertical integration actually occurs. Currently, Freightliner uses its own transmission for its medium duty trucks sold in NAFTA.<sup>21</sup>

<sup>&</sup>lt;sup>16</sup> Truck Group: 2007 Strategic Plan, EATON-00294402-31, at '03.

<sup>&</sup>lt;sup>17</sup> Truck Group: 2007 Strategic Plan, EATON-00294402-31, at '09.

<sup>&</sup>lt;sup>18</sup> Deposition of Kenneth F. Davis, October 23, 2008, 44:21 – 49-10.

<sup>&</sup>lt;sup>19</sup> Deposition of Richard Martello, January 9, 2009, pp. 176-178 and pp. 190-196.

<sup>&</sup>lt;sup>20</sup> Deposition of Greg Sharp, December 11, 2008, pp. 171-172 and 176-177.

<sup>&</sup>lt;sup>21</sup> Davis Deposition, October 23, 2008, p. 48-49.

#### III. ANTITRUST IMPACT

- 25. In analyzing antitrust injury, my task is to examine (1) whether anticompetitive effects occurred as the result of Eaton's alleged conduct and (2) whether ZFM suffered injury as the result of that alleged conduct. Dr. DeRamus describes a series of alleged actions by the OEMs, either alone or purportedly in conjunction with Eaton that, in his view, reduced ZFM's market share and ultimately caused Meritor to exit the heavy-duty linehaul transmission market. The alleged actions consist of the following:
  - Refusing to provide fleet customers with quotes for trucks equipped with ZFM transmissions;
  - Providing end-consumers with inferior leasing and warranty arrangements for ZFM-equipped trucks;
  - Delaying OEM engineering activities related to making the FreedomLine available to truck buyers;
  - Imposing retail surcharges on purchases of trucks equipped with ZFM transmissions;
  - Providing ZFM poor databook positioning, or none at all; and
  - Quoting low residual values of trucks with ZFM transmissions. 22

Although these actions were generally taken by OEMs—not Eaton—Dr. DeRamus links them to Eaton because they were allegedly undertaken by the OEMs to increase Eaton's share of OEMs' transmission purchases and thereby earn higher rebates from Eaton.

26. Even assuming, *arguendo*, that these actions occurred and can be linked to Eaton, they do not raise any antitrust issues, in themselves. From an antitrust standpoint, whether or not these alleged actions tended to affect or even exclude ZFM is irrelevant. Antitrust economics

<sup>&</sup>lt;sup>22</sup> DeRamus Report at ¶ 123.

examines whether a firm's actions harm competition generally and consumers in particular—not whether those actions reduce the profits of a rival firm. In an effort to characterize these actions as anticompetitive, Dr. DeRamus alleges that Eaton's long-term agreements ("LTAs") and other actions led to increases in (1) truck prices to end users<sup>23</sup> and (2) transmission prices to OEMs, starting in late 2005.<sup>24</sup> Below I demonstrate that Dr. DeRamus is incorrect in claiming that Eaton's conduct led to either type of price increase or that ZFM was affected. The only economically correct way to infer market power from price changes is to take into account contemporaneous cost changes. Adjusting prices for cost changes, I find no systematic increase. I also demonstrate that (1) for most of the relevant time period, ZFM's sales could have increased considerably without being affected by share-based rebates, and (2) that if ZFM were as efficient as Eaton, ZFM could have profitably undercut Eaton's entire price and rebate structure.

#### A. Bundled Discounts

Dr. DeRamus cites a paper that I co-authored with Patrick Greenlee and David Reitman ("GRS Paper") in his antitrust analysis of Eaton's LTAs.<sup>25</sup> This paper examines economic issues regarding the competitive effects of bundled loyalty discount pricing agreements. The bundling issues considered in the GRS paper can be explained as follows. Suppose a firm ("Firm 1") produces two products, A and B. Product A is produced only by Firm 1, but product B is produced both by Firm 1 and a competitor ("Firm 2"). If a consumer who purchases both A and B buys all her requirements of B from Firm 1, then she receives a discount on A. If the consumer buys some or all of her requirements for product B from Firm 2, then she

<sup>&</sup>lt;sup>23</sup> DeRamus Report at ¶¶ 257-260.

<sup>&</sup>lt;sup>24</sup> DeRamus Report at ¶ 251 and Figures 23-27.

<sup>&</sup>lt;sup>25</sup> DeRamus Report, footnote 329.

must pay a higher price for A, known as the "stand-alone" price. Dr. DeRamus does not attempt to see if this setup applies to the case at hand, much less use it in any way. In other words, despite the fact that the GRS paper is his only citation for his proposition that Eaton's rebates turned the LTAs into de facto exclusive dealing contracts, Dr. DeRamus does not do what an economist is supposed to do which is to apply the set up to the conditions in the market to test whether the LTAs are, in fact, exclusionary. Instead, Dr. DeRamus simply jumps from the assertion that the rebates may be exclusionary to the assertion that they are exclusionary.

- As a preliminary matter, if I were to agree that the GRS model is appropriate for use in analyzing the competitive issues in the present case, there is an implication of that paper that Dr. DeRamus appears to have missed. In that paper, GRS show that if (1) consumers in the A market have differing demands for Product A and (2) Firm 1 and Firm 2 make differentiated versions of product B, then the bundled discounts chosen by Firm 1 are a best response to the price set by Firm 2 (and vice versa), and those discounts do not depend on whether or not Firm 2 ever exits the B market. In other words, Firm 1 would choose exactly the same prices if Firm 2 was sure to remain in the B market as it would if Firm 2 were sure to leave in the near future. This implies that Firm 1 cannot be viewed as attempting to monopolize the B market. To the extent that Dr. DeRamus believes that GRS can be applied here, this result undermines his argument.
- 29. Dr. DeRamus claims that the GRS paper's analysis of the circumstances in which loyalty discounts can create *de facto* exclusive contracts applies to the LTAs between Eaton and the OEMs.<sup>27</sup> He then cites the economic literature on exclusive dealing to try to establish that

<sup>&</sup>lt;sup>26</sup> See Patrick Greenlee, David Reitman, and David S. Sibley, "An antitrust analysis of bundled loyalty discounts," International Journal of Industrial Organization, Vol. 26, no. 5 (2008), 1132–1152, Theorem 3, p. 1146.

<sup>&</sup>lt;sup>27</sup> DeRamus Report, ¶ 221.

exclusive dealing can sometimes reduce competition, using the GRS paper as a link between Eaton's LTA and a possible anticompetitive effect.<sup>28</sup> I do not agree that this link is correct. An exclusive contract limits the buyer to buying from the seller party to the contract. Eaton's LTAs did not do this. They gave OEMs incentives to buy more from Eaton in the form of rebates. However, if Meritor had been willing to reduce its prices by the amounts of the rebates, they would have neutralized these incentives and could have caused the OEMs to pass up Eaton's share-based rebates.

- 30. To try to make Eaton's rebates resemble bundled discounts as in the GRS paper, Dr. DeRamus points out that there are some types of transmissions that Eaton made but that ZFM did not make, as well as some types that both companies produced. In particular, Eaton made both performance and linehaul transmissions, whereas ZFM only made the latter. Dr. DeRamus seems to view performance transmissions as akin to the A product in the GRS paper, and linehaul transmissions as the B product. He takes the view that the OEMs had to use Eaton's linehaul transmissions so as to get discounts on the performance products, an advantage that ZFM could not match.
- 31. Dr. DeRamus has overlooked another critical difference between the GRS model and the LTA contracts of Eaton that takes it out of the bundling model set out in the GRS paper: the retroactive rebates offered by Eaton generally apply to *all* transmissions, both performance and linehaul. In contrast, the GRS model of bundled discounts assumes that the share-based discounts apply *only* to the B product that both firms produce linehaul in this case. This difference is substantive because to the extent that an appreciable amount of Eaton's

<sup>&</sup>lt;sup>2828</sup> Furthermore, as Dr. DeRamus notes, exclusive dealing can be efficient and precompetitive (see DeRamus Report, at ¶ 220). However he does not analyze which results applies here.

performance transmissions count towards the total, this weakens the share disincentive related to the purchases of linehaul transmissions sold by ZFM.

- 32. To see this more clearly, suppose that an OEM buys 100 performance and linehaul transmissions. The OEM receives a retroactive rebate from Eaton if 90% of the transmissions are purchased from Eaton. Suppose the OEM purchases 70 performance transmissions, which can be supplied only by Eaton. In order to earn the retroactive rebate from Eaton, the OEM must purchase at least 20 linehaul transmissions from Eaton. Therefore, of the total (30) linehaul transmission needs of the OEM, the OEM can purchase up to 33% (i.e., 10/30) from ZFM and still earn its rebate from Eaton. In other words, because Eaton sold transmissions that ZFM did not, ZFM could still sell up to 33% of the OEM's linehaul transmissions and not just 10 percent without affecting its ability to obtain retroactive rebates. This feature is absent from the literature on bundled discounts, including GRS.
  - B. Did the LTAs Prevent ZFM from Selling More Transmissions?
- 33. This last point has an important implication for the alleged antitrust impact of Eaton's LTAs. Suppose that ZFM sold only 8 transmissions, or 27 percent, of the overlap segment (i.e. 8/30). In this case, the Eaton contract would not create any disincentive for the OEM to purchase more transmissions from ZFM. These additional purchases would not result in the OEM losing retroactive rebates from Eaton. On the other hand, suppose that ZFM sold 15 transmissions, or 50 percent, of the overlap segment, thus exceeding the maximum allowable 33 percent. Suppose further that, over time, ZFM's share declines until it equals 33 percent of the overlap segment. Does this mean that the share provision alone caused the OEM to reduce its purchases of ZFM transmissions from 15 to 10? Not necessarily, because as discussed below,

ZFM could potentially have priced its transmission low enough to induce the OEM to forgo Eaton's rebates and ignore the share provision.

34. For Freightliner, Paccar, and International, the data on performance and linehaul sales for the period 2000-2006 allow me to calculate whether ZFM would have had to lower its price to overcome the share provisions in the LTAs. (I do not have sufficient data to make these calculations for sales to Volvo/Mack because I do not know how many linehaul transmissions Mack produced internally.) Freightliner is something of a special case. It was not until 2003 that rebates became linked explicitly to Eaton's share of transmission sales at Freightliner. When the Freightliner agreement was first signed, at the end of 2000, rebates were paid by Eaton, but they were not linked to Eaton's share. Apparently, Eaton expected its share at Freightliner to grow over time to 92 percent at a certain rate, but the LTA did not explicitly link either the base price or the rebates to Eaton's share of sales with Freightliner. Freightliner did not satisfy this commitment, and Eaton took the position that it was no longer obligated to provide the rebates (but continued to provide the base price concession implied by the contract). In 2003, Eaton agreed to pay the rebates retroactively, even though Freightliner had not met the 92 percent target, and, in July 2003, they agreed to create a tiered rebated structure as an amendment to the November 2000 agreement.

35. Figure 1 shows whether or not Eaton's LTA with Freightliner constrained ZFM's sales. Starting in 2001, the blue line shows the maximum percentage of linehaul transmissions that ZFM could sell to Freightliner such that Freightliner would still earn its rebate with Eaton.<sup>29</sup> The blue line is at 100% in the period 2000-2002 because, as described above, Eaton and Freightliner did not have a share-based agreement pertaining to rebates. The red line shows

<sup>&</sup>lt;sup>29</sup> That is, if the graph had shown the example above, the blue line would represent the 33% that the OEM could purchase from a non-Eaton firm and still earn its discount from Eaton.

ZFM's actual share of linehaul transmission sales with Freightliner. As demonstrated in the figure, the rebate provision would not have forced ZFM to lower its price to sell more to Freightliner. Moreover, suppose that ZFM's sales to Freightliner did decrease to some extent as a result of Eaton's LTA. As I demonstrate below, if ZFM had been as cost efficient as Eaton, and if the Freightliner prices and rebates were typical of the average for OEMs, ZFM could have made more sales by profitably lowering its prices to offset the discounts that OEMs would lose from Eaton. In this case, the red line in Figure 1 would have crossed and exceeded the blue line, indicating that Freightliner had chosen to purchase a sufficiently large volume of transmissions from ZFM so as to cause them to lose their discounts from Eaton. This would have been in the interests of Freightliner if ZFM offered a price reduction sufficiently large to offset the discounts OEMs lost from Eaton.

- 36. Figure 2 shows whether or not Eaton's LTA with Paccar would have forced ZFM to lower its price to sell more. As the figure makes clear, for the entire period under study, ZFM's share at Paccar was well below the level at which rebates came into play. Hence, Paccar faced no disincentive in purchasing more from ZFM. Purchases were not at the point where Paccar would have needed to reduce purchases from ZFM in order to maximize its rebates from Eaton. The clear inference in that ZFM was out-competed by Eaton for Paccar's business.
- 37. Finally, Figure 3 shows whether or not Eaton's LTA with International would not have forced ZFM to lower its price to sell more to International do to Eaton's rebates. From the fourth quarter of 2001 until the third quarter of 2003, International did not buy enough transmissions from Eaton to meet the minimum 80 percent share required to qualify for rebates; hence the blue line is at 100 percent. Both before and after this period, ZFM's share of linehaul transmissions at International (the red line) was below the blue line showing the maximum

percentage of linehaul transmissions that ZFM could sell to International such that International would still earn its rebate with Eaton. Again, the economic evidence shows that the contract between International and Eaton did not prevent ZFM from increasing its sales to International. Again, to the extent that ZFM's sales to International did decrease to some extent as a result of Eaton's LTA, if (a) Eaton's pricing to International was typical of the OEM average and if (b) it was as efficient as Eaton, then ZFM could have profitably prevented this decrease in sales by lowering its prices to offset the discounts that OEMs would lose from Eaton. This would have been a profitable pricing strategy for ZFM if it had been as efficient as Eaton.

- 38. Documents produced in this case shed light on other reasons why ZFM did not sell as many transmissions at it could have, even given the penetration rate requirements for the OEMs to obtain rebates from Eaton. I discuss this point in detail below, but the primary findings are as follows. First, both OEM and ZFM source documents agree that ZFM suffered from not having the same full range of heavy-duty transmissions that Eaton had. Second, Eaton offered OEMs attractive price and rebate concessions that ZFM did not match. Third, ZFM's G-platform transmissions were not highly regarded, compared to the corresponding Eaton products.<sup>30</sup>
  - C. Eaton's Discounts on Non-Overlap Transmissions Would Not Have Prevented ZFM from Competing Successfully if it were as Efficient as Eaton
- 39. So far, I have established that the share disincentives related to rebates in Eaton's LTAs did not constitute a firm limit on ZFM's sales of linehaul transmissions to major OEMs. Still, one might ask whether ZFM was denied significant growth at some OEMs because of Eaton rebates that would be potentially lost by OEMs who expanded ZFM sales significantly. In

<sup>&</sup>lt;sup>30</sup> ZF Meritor LLC, Board of Directors, April 3, 2001 Meeting, ZFMA0034148-9; ZF Meritor Joint Venture, Board of Directors Revised 5-25-99, ZFMA0371514; Deposition of Michael Elwell, 56:18 – 57:6; Deposition of Christian Benner, 103:1-9; Deposition of Thomas Lundahl, 147:9 – 153:3, and 156:4 – 157:13; Deposition of John D. Buck, 181:7-25 – 182:9; Deposition of Paul Barkus, 208:22 – 209:9; ZFMA0213049; ZFMA0089985; ZFMA0186327; and ZFMA0164328.

order to investigate this issue, I examine the size of these retroactive rebates, calculated over all types of transmissions, and determine if they were large enough to have prevented ZFM from competing with Eaton, assuming that the two firms were equally efficient in the manufacture and sale of linehaul transmissions. In making these calculations, I allow for the presence of SPIFF payments by Eaton to truck purchasers.

- 40. My analysis examines whether an "equally efficient competitor" could profitably undercut the price charged by a firm selling a bundle of products. This test envisions a situation in which a firm with a non-contestable product (A) also sells a contestable product (B) in a market characterized by rivalry. In this situation, a discount pricing plan would give discounts on the noncontestable product to customers who buy at least a stated percentage of their demands for the contestable product from the firm that also makes the non-contestable product.
- 41. If a customer buys too large a quantity of product B from a competitor, he loses retroactive rebates on both products A and B. In order to evaluate the competitive effects of such a rebate pricing plan, the equally efficient competitor test calculates the total amount of rebates available from both A and B and then allocates those rebates to the contestable product sold by the producer of the noncontestable product ("Firm 1"). Dividing that total discount applied to B by the number of units of B sold by Firm 1, we obtain the discount over both products per unit of B. This discount is then subtracted from the list price of B set by Firm 1. If this "net" price of B exceeds Firm 1's average variable cost of B, then the bundled discount plan is not inhibiting competition.<sup>31</sup>
- 42. The equally efficient competitor test can be applied here. The A product in this case consists of all performance transmissions and the competitive B market consists of linehaul

<sup>&</sup>lt;sup>31</sup> The GRS paper does not distinguish between up-front discounts or retroactive rebates. In the GRS setting either term could be used, although GRS uses the term 'discounts."

transmissions. Table 1 shows an estimate of the dollar value of Eaton's rebates for linehaul and non-linehaul transmissions over the period 1998-2007. For example, as shown in the last Column, Eaton's total rebates in 1998 were \$8.9 million. These rebates were calculated by using information on the penetration rates in the LTAs (obtained from Dr. DeRamus' report) and by using information on Eaton's rebates to OEMs (obtained from Eaton's LTAs).

- 43. Given these rebates, Table 2 carries out the equally efficient competitor test for the period 1998-2006 for Eaton's sales to Freightliner, International, Paccar, and Volvo/Mack. Column 1 shows the average gross price of Eaton's linehaul transmissions, and Column 2 shows the corresponding quantity. Column 3 shows Eaton's total rebates (i.e., the same values that are shown in the last column of Table 1). Column 4 divides Column 3 by Column 2, to obtain the average rebate per Eaton linehaul transmission. This rebate is then subtracted from the gross linehaul transmission price in Column 1 to give the average price per Eaton linehaul transmission less the bundled rebate, as shown in Column 5. Column 6 gives the ratio of Eaton's "average variable cost" (including SPIFF payments) to gross price that would allow Eaton to break even. Finally, Column 7 gives the ratio of Eaton's average variable cost (including SPIFF) to gross price. For a given year, if the number in Column 7 is less than the number in Column 6, then Eaton's rebates satisfy the equally efficient competitor test.
- 44. As shown in Column 7 of Table 2, Eaton passes the equally efficient competitor test in all years. Applications of the test separately to Freightliner, International, Paccar, and Volvo/Mack are shown in Tables 3-6, respectively. Eaton passes the test for all four firms in every year with one exception, Freightliner in 2001 Therefore, had ZFM been as efficient as

<sup>&</sup>lt;sup>32</sup> I calculate Eaton's "average variable costs" based on manufacturing costs plus distribution expenses shown in Eaton's NAFTA HD Consolidated P&L. Average variable cost = [(Standard Costs + Total Variances + Distribution Exp) / Total Sales] x Eaton's average price.

Eaton, it could have undercut the entire combination of Eaton's prices and rebates, and ZFM still could have charged prices well above its average variable costs, including SPIFF payments.

- 45. In sum, based on the equally efficient competitor test, ZFM was not precluded from competing because of the retroactive rebates in Eaton's OEM contracts. The fact that ZFM failed to compete successfully must be either (1) because it did not realize that this was possible; (2) because of ZFM's quality and warranty problems; or (3) its average variable cost was significantly higher than was Eaton's.
- 46. My economic analysis demonstrates, therefore, that (1) ZFM could have sold considerably more than it did without causing OEMs to lose any retroactive rebates from Eaton, and (2) if ZFM had the same average variable costs (including SPIFF payments) as Eaton, ZFM could have profitability undercut Eaton's prices net of rebates. This leads me to conclude that Eaton's LTAs were not anticompetitive.
  - D. Did Eaton's Conduct Injure Competition?
- 47. In this section I will demonstrate that the aspects of Eaton's conduct that Dr. DeRamus regards as anticompetitive had no anticompetitive effect. At two points in his expert report, Dr. DeRamus argues that actions of Eaton led to price increases, which is the only purported evidence he claims of anticompetitive outcomes. First, Dr. DeRamus argues that Eaton's actions caused truck prices to rise.<sup>33</sup> Second, he claims that Eaton raised prices after the ZFM joint venture failed, supposedly knowing that its exclusionary actions had eliminated competition from the transmission market.<sup>34</sup>

<sup>&</sup>lt;sup>33</sup> DeRamus Report, ¶¶ 257-260.

<sup>&</sup>lt;sup>34</sup> DeRamus Report, ¶ 251 and Figures 23-27.

#### 1. <u>Truck Prices</u>

- 48. Dr. DeRamus advances an elaborate theory that purports to link Eaton's LTA agreements with increases in truck prices sold to end users. His theory has three components. First, he claims that the enhanced rebates achieved through the LTAs were designed to give Eaton monopoly status with the OEMs and to share "monopoly rents" with OEMs, inducing them to engage in exclusionary acts towards ZFM. Second, the OEMs allegedly did not pass these cost savings through to truck buyers. Finally, starting in 2005, Eaton reduced SPIFF payments to fleets.<sup>35</sup> Given that the OEMs supposedly did not pass through decreased transmission prices to these fleets, as a matter of arithmetic, they paid more an anticompetitive outcome according to Dr. DeRamus' theory.
- I will assume, <u>arguendo</u>, that Dr. DeRamus is correct that the OEMs did not pass through reduced transmission prices made possible by the Eaton LTA agreements. (I do not agree that that this is necessarily correct.) However, even with this assumption, there is no link between Eaton's LTA agreements and higher truck prices. The critical intermediate step in Dr. DeRamus' argument is that the OEMs did not pass through any cost savings to truck buyers. This alleged failure, assuming it occurred, was due to actions of OEMs—not Eaton. There is, therefore, a fundamental disconnect in Dr. DeRamus' argument, even assuming that its factual premise is correct. In any case, ZFM cannot plausibly claim to have been injured by higher retail truck prices.
- 50. This argument also contains an error in economic logic. A basic principle of microecoconomics is that firms produce at the level of output where the extra revenue of an additional unit of output equals the extra cost of that unit. If the extra cost of one more truck

<sup>&</sup>lt;sup>35</sup> DeRamus Report, Figure 29.

falls, OEMs maximize their profits by producing more trucks, even though that will cause the price to fall. Units of truck output that were not profitable to undertake at a high cost per additional truck become profitable to produce at lower cost per additional truck. This necessarily involves some reduction in price. A lower transmission price to an OEM lowers the cost of an additional truck. Therefore, according to basic economics, the OEMs, in their own interest, would lower truck prices. To assume otherwise, as Dr. DeRamus does, is to make a basic error.

#### 2. Higher Transmission Prices?

- In his report Dr. DeRamus states: "In 2005, when ZFM started considering and discussing with OEMs the possibility that it would exit the market. . . ."<sup>36</sup> At that time, according to Dr. DeRamus, Eaton allegedly increased its prices for automated transmissions (i.e., for AutoShift and UltraShift) sold to Freightliner and to International. These products competed with ZFM's FreedomLine transmission.<sup>37</sup> Dr. DeRamus also claims that Eaton increased its prices for manual transmissions sold to International. These price increases took place in late 2004 and early 2005, according to Figures 23-27 of Dr. DeRamus' report. According to Dr. DeRamus' argument, Eaton was able to increase its prices at that time because competition from ZFM had disappeared, once the joint venture between Meritor and ZF dissolved. He appears to believe that these alleged prices increases constitute strong evidence that ZFM's weakening competitive position and eventual exit led to a decline in competition, allegedly due to Eaton's LTAs. Given what he concludes is evidence of a decline in competition, should we agree with Dr. DeRamus that ZFM sustained antitrust injury?
- 52. I disagree with Dr. DeRamus for two reasons. First, Dr. DeRamus interprets the price increases shown in his Figures 23-27 as evidence of a decline in competition. Dr. DeRamus

<sup>&</sup>lt;sup>36</sup> DeRamus Report, ¶ 251.

<sup>&</sup>lt;sup>37</sup> DeRamus Report, ¶ 251.

is wrong. These figures show only gross prices over time, i.e., prices not adjusted for changes in input costs. Figures 23-27 show that gross prices were flat until late 2004. However, costs may well have gone up over time even though prices did not. Viewed in that light, it is not surprising that prices went up eventually – prices may have gone up simply because costs did. Second, this argument leaves unexplained why Eaton was able to raise manual transmission prices at International and Freightliner, but not at other OEMs.<sup>38</sup>

- 53. To investigate the extent of cost increases, I examined the contracts between Freightliner and Mack, which describe the appropriate cost index to apply to transmissions. Eaton's supply agreement with Freightliner, for example, shows the components of the index and their weights.<sup>39</sup> The components are: forgings, grey iron, aluminum, bearings, fasteners, and low-alloy steel. Figure 4 shows the behavior of this index over the period 2000-2008. The cost index is relatively flat from 2000 until early 2004 and rises rapidly thereafter, particularly in late 2004 and early 2005. Recall that Dr. DeRamus' Figures 23-27 show increases in gross prices during this 2004-2005 period. This suggests strongly that much or all of the gross price increases observed by Dr. DeRamus are attributable to cost increases and that transmission prices adjusted for cost increases may not have gone up at all.
- 54. My economic analysis confirms this conclusion, both at the NAFTA level and for Freightliner and International (see Figures 5-9). Consider, for example, Figure 7, which shows the price of UltraShift over time at Freightliner. The blue line shows the same gross prices that appear in Dr. DeRamus' Figure 26. However, the red line shows the cost-adjusted price of UltraShift transmissions sold to Freightliner—that price fell from 2000 until 2006, then rose only

<sup>&</sup>lt;sup>38</sup> See Eaton-01110890; Eaton-00385583; and Eaton-00382048.

<sup>&</sup>lt;sup>39</sup> Eaton-00385583.

to its initial level, before falling again. Adjusted for costs, there was no systematic price increase. The picture drawn by Dr. DeRamus is illusory.

- 55. Moreover, Figures 5-9 do not account for Eaton's discounts. Figures 10-12 show Eaton's transmission prices taking into account both increases in input costs and discounts. As shown in Figure 10, Eaton's net prices over the period 1998-2006 for all its North American sales of Linehaul manual transmissions did not increase, in contrast to the gross prices shown in Figure 27 of Dr. DeRamus' report. Figure 11 shows that Eaton's prices over the period 1998-2006 for all its North American sales of Automated Linehaul transmissions did not increase, in contrast to the gross prices shown in Figures 23-26 of Dr. DeRamus' report. Finally, Figure 12 shows that Eaton's net prices over the period 1998-2006 for all its North American sales of Vocational transmissions did not increase.
- 56. The results shown in Figures 5-12 also allow us to investigate a "natural experiment" that occurred in the market. Namely, if Eaton had substantial market power, then the exit of ZFM should have allowed Eaton to increase its prices. However, as shown in the figures, Eaton's prices, accounting for cost increases and discounts, did not increase. This provides strong economic evidence that Eaton lacks substantial market power.
- 57. Dr. DeRamus argues that ZFM's lower sales, allegedly caused by Eaton's actions, caused ZFM to face higher costs.<sup>40</sup> Dr. DeRamus fails to recognize that when firms have fixed costs, a reduction in their output for any reason will cause their average costs to increase. This fact does not indicate that any anticompetitive conduct has taken place—the increase in average cost can easily result from the normal operations of a competitive market. In this case, ZFM lost business because Eaton charged lower net prices. As a result of not being competitive on price,

<sup>&</sup>lt;sup>40</sup> DeRamus Report, ¶ 193.

ZFM's output fell and its average cost may have gone up as a result. In addition, Dr. DeRamus' claim ignores the fact that competition in markets is determined by firms' marginal costs—not their average costs. In this regard, the economic evidence shows that Meritor understood its own marginal costs of producing manual transmissions to be constant, thereby unaffected by scale. In addition, the marginal costs of producing FreedomLine transmissions likely were constant because these transmissions were produced on a large scale in a German factory. As a result, even assuming, *arguendo*, that Eaton's actions caused Meritor's average costs to increase, that increase did not affect the firm's marginal costs, which are the costs that constrain the exercise of market power.

#### E. Summary: Antitrust Impact

58. In this section, I have reached a number of conclusions. First, ZFM could have sold considerably more transmissions than it did without causing OEMs to lose any rebates from Eaton. Second, given Eaton's discounts and rebates, ZFM could have profitably undercut Eaton's prices had ZFM been as efficient as Eaton. In effect, it could have compensated the OEMs for lost rebates, even on transmissions that ZFM did not make. Third, Dr. DeRamus has shown no link between Eaton's alleged actions and price increases after accounting for increases in input costs. Based on my findings, I further conclude that ZFM experienced no antitrust-related impact or injury from Eaton's alleged conduct. Any losses sustained by ZFM were primarily the natural result of the competitive process.

<sup>&</sup>lt;sup>41</sup> ZFMA0356438-536, at 535.

#### IV. DAMAGES ANALYSIS

#### A. The But-for World

- 59. In this section, I assume that the plaintiff has proven liability on the part of Eaton. According to Dr. DeRamus, the alleged anticompetitive conduct is attributable to Eaton's LTA agreements, and he assumes that in the but-for world there are no LTA agreements. The main feature of the LTAs, as it affected ZFM, was the degree to which they allowed OEMs to obtain rebates by increasing the shares of their transmission purchases from Eaton. Therefore, in the but-for world, I assume that there would have been no such rebates.
- 60. If ZFM were significantly less efficient than Eaton, then in the but-for world without rebates the two firms would have competed on price and features. Holding constant the distinctive features of the main types of transmissions, it is likely that price was the main factor in determining OEM transmission choice, along with breadth of product line and quality. Hence, the relative cost efficiencies of Eaton and ZFM are an important competitive aspect of the but-for world. I have estimated two types of costs with which to compare the companies' cost efficiencies: average variable cost<sup>42</sup> and "average operating cost." Average operating costs include such items as fixed costs and overheads that are unrelated to specific product lines. Therefore, Eaton's average operating cost will be at least as high as Eaton's average variable cost.
- 61. I have estimated both types of average cost for Eaton and ZFM (see Tables 7 and 8). Table 7 shows the average operating costs for ZFM over the period 2005-2007 for the G

<sup>&</sup>lt;sup>42</sup> I calculate ZFM's "average variable cost" using the data in Dr. DeRamus' Tables 5 and 6 that specify the firm's "forecasted units" and "forecasted per unit variable cost."

<sup>&</sup>lt;sup>43</sup> Eaton's average operating cost (including SPIFF) was estimated using information in Dr. DeRamus' report on Eaton's operating profit margin (see DeRamus Report, ¶ 110) and information from Eaton's NAFTA HD Consolidated P&L. ZFM's average operating costs was estimated using information in Dr. DeRamus' report ¶ 110.

platform and for the FreedomLine. For Eaton, I have calculated average operating cost for all manual 9 and 10 speed transmissions and separately for the AutoShift and the UltraShift transmission. The average operating cost per G platform unit was \$2,929, whereas the average operating cost per Eaton manual transmission was \$2,239, i.e., 24 percent lower. The average operating cost per FreedomLine was \$6,602, i.e., 70 percent higher than Eaton's average operating cost for the AutoShift (\$3,851) and 59 percent higher than Eaton's average operating cost for the UltraShift (\$4,140). The weighted average operating cost for Eaton is \$2,479 and for ZFM is \$4,127, i.e., 66 percent higher.

- The argument could be made that these differences in average operating costs are due to the reduced scale experienced by ZFM as a result of the alleged anticompetitive conduct of Eaton. As discussed above, I do not consider this a correct economic argument. But even if that argument were economically correct, the comparisons of average variable cost are not subject to this criticism. As noted above, the economic evidence shows that ZFM's average variable cost does not vary with the level of output. Table 8 shows that ZFM's average variable cost from 2001-2005 was considerably higher than that of Eaton. The average variable cost for Eaton's manual transmissions over period 2001-2005 was \$1,953, whereas the average variable cost for ZFM's G platform transmissions was \$2,416, i.e., 24 percent higher. The average variable costs of AutoShift and UltraShift, were \$3,363 and \$3,510, respectively, compared to the average variable cost of ZFM's FreedomLine, \$4,004, i.e., 19 percent and 14 percent higher, respectively.
- 63. Because Eaton was more cost efficient than ZFM, Eaton could have set its prices at levels below ZFM's costs and still made a profit. Recall that in the but-for world, there would have been no LTAs and, hence, no rebates. Therefore, to make comparisons between prices and

costs, we must use gross prices, without rebates. The average gross price of an Eaton manual transmission over the period 2005-2007 was \$2,961, whereas ZFM's average operating cost for its G platform manual transmissions was approximately equal to that, \$2,929 (see Table 7). As for the FreedomLine, it was often equated by ZFM to the Eaton AutoShift. On that basis, the average gross price of an AutoShift, \$5,093 was substantially below ZFM's average operating cost of the FreedomLine, \$6,602. The same relationship holds for the average gross price of Eaton's UltraShift (\$5,475) compared to ZFM's average operating cost of the FreedomLine (\$6,602). Overall, this economic evidence suggests strongly that ZFM's relatively high operating and average variable costs would have made it economically non-viable in the but-for world.

This conclusion is strengthened by the equally efficient competitor analysis undertaken above in the discussion of antitrust impact. The conclusion of that analysis was that an equally efficient competitor of Eaton could have profitably undercut Eaton's prices and rebates, even accounting for SPIFF payments. Clearly, this did not happen. ZFM priced the FreedomLine well above Eaton's competing products, AutoShift and UltraShift, and ZFM did not discount its prices sufficiently to keep the OEMs from signing up with Eaton under LTA agreements or to induce them to buy from ZFM during the term of the LTAs. There appear to be two possible explanations for ZFM's failure to undercut Eaton's prices and rebates. One is that ZFM simply did not realize that it could do this. Assuming the ZFM managers responsible for such decisions were capable and experienced, this seems unlikely. The other explanation is that in the long-run ZFM could not have covered total costs, including fixed costs. In view of the above discussion of the relative costs of the two companies, this seems the most likely explanation.

- 65. If ZFM would not have been an economically viable competitor versus Eaton in the but-for world, then there are no damages resulting from Eaton's (assumed) anticompetitive conduct. This, then, is my affirmative opinion of the correct level of damages: zero.
  - B. Discussion of Dr. DeRamus' Damages Methodology
- of. Dr. DeRamus takes two distinct overall approaches to damages, although he also presents several variations of them. His first approach is based on the November 30, 2000 Strategic Business Plan ("SBP") presented to the ZF Meritor Board of Directors on that date. The SBP contains forecasts of revenues and units sold over the period 2001-2005, and Dr. DeRamus uses these forecasts in his damages analysis. He adopts the SBP without any critical evaluation. Any discrepancies between the plan's assumptions in 2000 and actual events at later dates are just assumed to reflect anticompetitive conduct by Eaton. In his second broad approach, he assumes that in the but-for world ZFM would have had the same costs as Eaton and would have sold its transmissions for the same prices as Eaton. He conducts no test of either assumption. In order to estimate ZFM's but-for profits, Dr. DeRamus multiplies Eaton's margin times ZFM's but-for market shares.
- 67. Both of these approaches logically conflict with plaintiffs' theory of the case. The plaintiffs allege that Eaton's conduct reduced competition in the relevant market for transmissions. This must mean that actual prices were higher than they would have been in a but-for world without this conduct. However, using the first approach, ZFM's but-for prices for manual transmissions are substantially <u>higher</u> than the prices actually charged by Eaton. Thus, according to Dr. DeRamus, a more competitive market for manual transmission in the but-for world would apparently have had <u>higher</u> prices, not lower prices.

<sup>&</sup>lt;sup>44</sup> As discussed below, Dr. DeRamus offers four different methods for estimating damages using his first approach.

<sup>&</sup>lt;sup>45</sup> As discussed below, Dr. DeRamus offers one method for estimating damages using his second approach.

- 68. Dr. DeRamus' second approach has the same kind of problem. If Eaton's actual prices reflect reduced competition due to Eaton's alleged conduct, then in the but-for world with more competition, prices should be lower. Dr DeRamus' approach amounts to saying that ZFM simply deserved more of the "monopoly" rents than it actually received. His second approach is logically inconsistent with the claim that the actual world is less competitive than the but-for world. Yet this claim is the one the plaintiffs make.
- 69. Below I discuss Dr. DeRamus' damages analysis in more detail. However, despite the problems that I note below, the primary problem is that neither of his two approaches make economic sense. It is also important to observe that Dr. DeRamus presents no analysis that supports a conclusion that the conduct he identifies as anticompetitive in his report (e.g., the conduct described in paragraph 9 of his report), was the source of any diminution in ZFM's sales, share, or profits. Moreover, if any individual element or group of elements is found to be unlawful, his damage methodology is not capable of isolating the effects of any specific act(s).

#### C. Analysis of Dr. DeRamus' Damages

70. Dr. DeRamus claims that Eaton's LTAs with OEMs resulted in financial harm to ZFM in the range of \$643 million to \$826 million in present value as of February 2009. His estimate of damages has two components: (1) lost profits for the period July 2000 through February 2009 and (2) the lost enterprise value of the ZFM Transmission business on a going forward basis starting in February 2009. The inclusion of lost enterprise value in his damage estimate is based on his assumption that the alleged anticompetitive conduct forced ZFM to exit the market. He acknowledges that his measure of damages is equivalent to measuring the lost profits to ZFM from the beginning of the alleged damage period to perpetuity, discounted to the

<sup>&</sup>lt;sup>46</sup> Dr. DeRamus' damage estimates range from \$643 million to \$778 million when has risk free rate is used to calculate the present value of alleged damages and from \$672 million to \$825 million when AvrinMeritor's cost of debt is used to calculate the present value of alleged damages. See DeRamus Report, Table 13 at p. 148.

present using an appropriate rate of interest. I address both components of his damages analysis below.

#### 1. Lost Profits for the Period July 2000 Through February 2009

- 71. Dr. DeRamus uses five alternative methods to calculate lost profits for the period July 2000 through February 2009. Methods One and Two are similar, in that lost profits are defined as the incremental revenues less incremental costs the plaintiff would have earned but for the alleged anticompetitive conduct. The methods differ only in the technique he uses to estimate the number of ZFM transmissions sold but for the alleged conduct. In Methods Three and Four, he uses the same incremental revenue derived in Method One, but adds additional overhead costs to account for possibly higher levels of operating expenses and certain fixed costs required to achieve the but-for sales.<sup>47</sup> Method Five assumes ZFM's but-for profit margin would have been similar to the profit margin earned by Eaton on comparable transmissions.
- Method One: Based on ZFM's November 2000 Strategic Business Plan. In order to estimate the number of transmissions (and associated sales revenue) ZFM would have sold but for the alleged conduct, Dr. DeRamus relies entirely on a strategic business plan presented to ZFM's Board of Directors on November 30, 2000 ("November 2000 SBP"). That plan included a five-year product line profit and loss statement based on a forecast of unit sales, unit prices, manufacturing costs, and operating expenses, and other line items. Dr. DeRamus made only one change to the 2000 SBP: he changed the number of transmissions sold to account for the difference between actual Class 8 truck builds in NAFTA and the number of Class 8 truck builds in NAFTA on which ZFM's forecast of transmission sales was based. He states that Class

<sup>&</sup>lt;sup>47</sup> In Method Three, additional overhead costs are added after fiscal year 2003 (after the dissolution of the joint venture). In Method Four, the additional overhead costs are added beginning in fiscal year 2002.

<sup>&</sup>lt;sup>48</sup> ZFMA0034361-375.

8 trucks builds differed from ZFM's estimates because of "macroeconomic fluctuations that ZFM could not have predicted accurately at the time it prepared the November 2000 SBP." However, Dr. DeRamus offers no explanation as to why ZFM's ability to forecast competitive transmission prices and ZFM's transmission share (i.e., the two other variables from which his estimate of ZFM's but-for incremental revenue is based) is better than its ability to predict Class 8 truck builds. In fact, Dr. DeRamus offers no details on the analysis or modeling assumptions ZFM relied upon in developing its plan. He simply asserts that the forecast in the November 2000 SBP is conservative because (according to him) the plan already incorporated ZFM's management's view of the effects of allegedly anticompetitive conduct by Eaton that occurred before the plan was developed. Other than that, he does not try to justify the SBP forecasts as being accurate or scientifically based.

73. Dr. DeRamus' reliance on the November 2000 SBP is problematic for a variety of reasons. First, ZFM continually updated its five-year forecasts since the inception of the joint venture. Over time, the sales forecasts in those plans were routinely adjusted downward. Dr. DeRamus is of the view that these downward adjustments were primarily driven by effects of the alleged conduct on ZFM sales. However, factors other than the alleged conduct also played an important role based on my review of ZFM planning documents. For example, in April 1999, in a review of its initial transmission strategy, ZFM noted that its initial results were not achieved (both in terms of financial expectations and market penetration) because its products were "plagued by warranty issues," its products "cover[ed] only 75 percent of Class 8 market," and

<sup>&</sup>lt;sup>49</sup> DeRamus at ¶ 276, p. 124.

<sup>&</sup>lt;sup>50</sup> See ZFMA0074508-14 at 509, and ZFMA0000340-355.

"Eaton continues technology superiority."<sup>51</sup> In a presentation to the Board of Directors on July 13, 2000, when discussing the variance between projected market share penetration (expected to increase from 16.1% to 21.7%) and actual (decrease from 16.1% to 13%), Mr. Richard Martello, President of the ZFM joint venture) discussed a number of factors that contributed to this situation including:

(i) poor product quality image; (ii) a decrease in Ryder business; (iii) turnover in the Company's sales organization, (iv) an increase in sales of Eaton AutoShift; (v) the push toward 13-speed transmissions, especially by Freightliner, (vi) the multi-year fleet business lost due to competitive equalization cutbacks in early 1999 and (vii) controlled distribution.<sup>52</sup>

Clearly factors other than the alleged conduct that DeRamus asserts were present prior to July 2000 influenced ZFM's success in selling transmissions. Future deviations between actual and expected success along any of these factors are possible explanations for why actual sales were less than those envisioned in the plan.

Examples of non-conduct variables that potentially influenced ZFM's sales include continued product quality problems and ZFM's inability to offer a full product line. With respect to product quality, ZFM in July 2001 recognized that quality issues had limited its success and that future product reliability was key to the success of the joint venture.<sup>53</sup> Indeed one of the recognized risks in assessing its plan in July 2001 was that the G platform problems may not be fixed.<sup>54</sup>

<sup>&</sup>lt;sup>51</sup> ZFMA0368680.

<sup>&</sup>lt;sup>52</sup> ZFMA0356445; See also Rule 30(b)(6) Deposition of Plaintiffs, dated February 4, 2009 at 144-149.

<sup>&</sup>lt;sup>53</sup> See ZF Meritor Strategy (dated July 10, 2001) at ZFMA0000233 ("product issues have limited our success in the market") and ZFMA0000239 ("future product reliability of JV products is key").

<sup>&</sup>lt;sup>54</sup> ZFMA0000242.

75. The need to offer a more complete product line was also a factor known to have influenced ZFM's sales.<sup>55</sup> A full product line was believed to be important in (1) gaining a partnership with any OEM, (2) protecting the linehaul business, and (3) protecting residual value in the used truck market.<sup>56</sup> In April 2001, ZFM recognized that it had not achieved its goals of having a full product line because at that time the company was still discussing the issue of how to obtain a full product line faster.<sup>57</sup>

Use of the plan is also problematic not only because it attributes the entire difference between the plan's forecast and ZFM's actual sales to the alleged conduct, but also because no attempt is made by Dr. DeRamus to isolate or disaggregate damages. Rather, it is an aggregate estimate of damages that is not linked to any specific OEM agreement. There is reason to believe that the economic impacts of these LTAs were not uniform across OEMs. For example, the fact that Volvo/Mack is vertically integrated may help explain why it did not have as high a share target as the other OEMs in order to begin to obtain rebates. As I discussed above, the Freightliner agreement with Eaton had no explicit link between rebates and shares until 2003, whereas they were always a feature of the Paccar agreement. Looking at the actual behavior of the OEMs and ZFM, the experience of Paccar shows that ZFM was nearly always a substantial distance from the rebated-related shares implied by Paccar's agreement with Eaton. All of this suggests that the differences between OEM purchases from ZFM in the but-for world and actual ZFM sales vary across OEMs in important ways. Dr. DeRamus' methodology offers no way to isolate these separate effects.

 $<sup>^{55}</sup>$  See, for example, ZFMA0369763.

<sup>&</sup>lt;sup>56</sup> See ZFMA0348171.

<sup>&</sup>lt;sup>57</sup> ZFMA0348171.

- Finally, because the November 2000 SBP does not provide forecasts of ZFM's business after fiscal year 2005, Dr. DeRamus develops his own projections of plaintiffs' manual and automated transmission sales during the period 2006-2009. In particular, he holds constant ZFM's share of manual transmissions (as a percentage of Class 8 truck builds) in 2006-2009, and projects further increases in ZFM's share of automated transmissions. His methodology for predicting the future growth in FreedomLine's share of Class 8 truck builds is based on a simple trend analysis that does not consider explicitly any economic factor likely to explain FreedomLine's share such as relative prices, product quality, and ZFM's ability to offer a full-product line, etc. In reality, the projected growth in the number of automated transmissions (relative to manual) projected by the plan and Dr. DeRamus' trend analysis did not occur, either at ZFM or at Eaton. Eaton's actual sales of automated manual transmissions accounted for approximately 13 percent of its total linehaul sales in 2008, a value well below the plan's estimate of 50 percent for ZFM's automated linehaul sales.
- Method Two: Econometric Model of Damages. Dr. DeRamus' Method Two differs from his Method One in only one respect. Instead, of relying on the forecast of ZFM's share of Class 8 truck builds contained in the November 2000 SBP, he constructs an econometric model to estimate ZFM's share. Therefore, the logical problems with Method 1 as a but-for scenario apply here, as well. Using his model, for each fiscal year, he derives ZFM's but-for transmission sales (in units) by multiplying the predicted share by the actual number of Class 8 truck builds. It is important to note that in doing so, he continues to rely on the plan's assumptions regarding the mix of manual and FreedomLine transmissions sold by ZFM in each fiscal year. Thus, his claim that his econometric analysis confirms the accuracy of November 2000 SBP forecast is not correct; he assumes that it is accurate in this respect. An important

element in estimating the growth rates of the individual products (i.e., the mix of manual and FreedomLine transmissions) is based entirely on an assumption contained in the November 2000 SBP, which is not tested or confirmed at all by his econometric analysis.

- 79. Using monthly data for the period January 1990 through September 2007, his econometric model relates ZFM's share of Class 8 truck builds to the following "macroeconomic" variables: (1) the number of heavy duty truck builds in NAFTA; (2) an index of consumer confidence in the U.S.; (3) the average wholesale price of oil in the U.S.; and (4) the 5-year U.S. Treasury Constant Maturity interest rate. He also includes ZFM's share in the previous month to capture "market dynamics." In addition to the above variables, he includes a variable (referred to as the conduct indicator variable) that takes the value of zero before July 2000 and a value of one from July onward. He allows the conduct variable to interact with all the other variables in his model to allow the relationship between the macroeconomic variables and market share to be different between two time periods: the period prior to the alleged conduct (i.e., January 1990 through June 2000) and the conduct period (July 2000 through September 2008). In effect, he uses the estimated relationship between the macroeconomic variables in the pre-conduct period to forecast ZFM shares in the alleged conduct period. During the pre-conduct period (holding other factors constant) he found increases in the consumer confidence index and oil prices increase ZFM's share of U.S. Class 8 truck builds, while increases in truck builds and interest rates decrease ZFM's share.
- 80. There is a fundamental flaw in Dr. DeRamus' econometric model -- there is no economic logic to it. For example, why should the level of consumer confidence, interest rates, and oil prices have any effect on ZFM's share of the Class 8 trucks builds? He offers no

explanation. He seems to be only interested in statistical predictions of ZFM shares, without any economic understanding for what determines those shares.

- Absent from his model are important determinants of ZFM's share such as (1) the relative prices of ZFM and rival transmissions, (2) the perceived quality of ZFM's product versus other alternatives, (3) the extent to which ZFM offers a full product line, and (4) OEM's brand preferences, among others. It is well-known in econometrics that the omission of relevant explanatory variables from a regression model can bias the parameter estimates of the variable that are included in the model.<sup>58</sup>
- Figure 13 shows ZFM's actual share and but-for share based on Dr. DeRamus' econometric model. As shown in the figure, ZFM's but-for share increases rapidly from August 2006 through May 2008, more than doubling. According to Dr. DeRamus' model, the rapid increase in ZFM's share during this period is largely determined by a decline in the interest rate and a run up in the price of oil. For example, during this time period interest fell from 4.98 percent to 3.05 percent and oil prices increased from \$73/barrel to \$125/barrel. Using Dr. DeRamus' model, Figure 13 also illustrates what the but-for share would be if one simply assumed that the interest rate did not decline during this period but rather remained constant at its August 2006 level. As can be seen in the figure, in this scenario, ZFM's but-for share is significantly reduced. But why would a change in the interest rate cause OEMs to purchase more ZFM transmission versus those from other suppliers? Dr. DeRamus offers no explanation.
- 83. It is also worth exploring an alternative way of defining shares. Dr. DeRamus' shares are defined as ZFM units sold divided by NAFTA Class 8 truck builds. However, many Class 8 trucks did not use transmissions of the types that ZFM made, e.g., vocational

<sup>&</sup>lt;sup>58</sup> See, for example, Green, William, (1993), ECONOMETRIC ANALYSIS, 2<sup>nd</sup> Edition, MacMillian Publishing, at p. 243-244.

transmissions. Thus, movements in ZFM's share could have nothing to do with Eaton's conduct but rather could reflect changes in the mix of transmissions used in Class 8 builds from month to month. This suggests that it might be useful to focus on ZFM's share of the combined manual and automated linehaul transmissions sold by ZFM and Eaton.

- 84. Thus, as an alternative to Dr. DeRamus' model, I estimated an econometric model using this alternative way of defining ZFM's share. In doing so, I included the same explanatory variables included in Dr. DeRamus' model. In constructing the share variable, I used the actual number of G-platform and FreedomLine transmissions sold by ZFM and the actual number of Manual 9 and 10 speed, AutoShift 10 speed, and UltraShift 10 speed transmissions sold by Eaton. The data available to determine the share estimate was first available in October 1995, so I estimated the econometric model starting from that date. The results of the econometric model are shown in Table 9.
- then calculated damages using the same procedure followed by Dr. DeRamus. That is, I used the same assumptions regarding the mix of manual and automated manual transmissions, incremental cost, and discount rates to calculate the present value of lost profits. My findings are presented in Table 10. As shown in the table, the present value of lost profits using Dr. DeRamus' risk free rate is approximately \$32.8 million, and the present value of lost profits equals approximately \$37.2 million using ArvinMeritor's cost of debt. In addition, the number of manual and automated manual transmissions sold by ZFM in the but-for world is well below the number of transmissions ZFM estimated would be required to meet its break-even requirements. As noted by Dr. DeRamus, internal analysis performed by ZFM indicated that the company needed to sell approximately 32,000 manual transmissions to satisfy its break-even

constraint.<sup>59</sup> The quantity of transmission sales reported in Table 10 falls well below the required levels in all years. Thus, a further implication of this but-for scenario is that ZFM would have no enterprise value in February 2009.

86. Whatever the results of varying Dr. DeRamus' econometric procedure, it is important to keep in mind that the but-for world assumed by Dr. DeRamus makes no logical sense, as I described above. His supposedly more competitive world somehow leads to higher manual transmission prices. All of the criticisms that I have made of Method 1 apply here as well, except for market share determination in the but-for world. Hence, for calculating damages, improving the econometric shares does nothing to save the overall approach of Method 2, based, as it is, on Method 1. Therefore, I conclude than under this method, too, damages equal zero.

Methods 3 and 4: ZFM Lost Profits Assuming Incremental Fixed Costs As noted above, Method 3 is a variant of Method One in which Dr. DeRamus uses the same incremental revenue, but adds additional overhead costs to account for possibly higher levels of operating expenses and certain fixed costs required to achieve the but-for sales. However, in this scenario, Dr. DeRamus changes his assumptions about the but-for world. Specifically, he attempts to "account for the possibility that in order to achieve the estimated 'but-for' sales after 2003, i.e., after the dissolution of the joint venture, ZFM would have to incur additional overhead costs." He offers no explanation as to why the joint venture would collapse in the but-for world. (Elsewhere he attributes the collapse to Eaton's conduct, which of course, is absent in the but-for world.) Method 4 differs from Method 3 in that he includes incremental overhead costs

<sup>&</sup>lt;sup>59</sup> See DeRamus Report at ¶ 195, ZFMA0356438-536, at 535.

<sup>&</sup>lt;sup>60</sup> DeRamus Report at ¶299, p. 134.

in fiscal years 2000-2003 (i.e., prior to the dissolution of the joint venture). The inclusion of overhead costs in these earlier years would suggest such costs would be relevant to include even if the joint venture had remained in place. The addition of these costs reduces his damages estimates by approximately \$200 million. The inclusion of such costs in the econometric analysis I discussed above (i.e., \$32.8 million in present value using the risk free rate and \$37.1 million in present value using ArvinMeritor's cost of debt) would cause my estimates to fall well below zero. This simply reinforces my view that ZFM would not be viable in the but-for world.

- 88. Since Methods Three and Four are similar to Method One with the exception of the inclusion of additional costs, they suffer from the same flaws identified in my analysis of Method One above.
- Profits. I discussed above the conceptual problems inherent in this approach. Nonetheless, it bears repeating that when analyzing antitrust liability, Dr. DeRamus asserts vigorously that Eaton's conduct reduced competition and led to higher prices. However, in this method for calculating damages, he assumes that absent the alleged conduct, prices would have been unchanged at levels that do not reflect the extra competition supposedly provided by ZFM in the but-for world. Under his assumption, ZFM's claim for damages is simply that it should have received a higher share of rents due to market power than it actually received.

## 2. Lost Enterprise Value

90. As noted above, Dr. DeRamus included lost enterprise value as of February 2009, as the second` component of his damages estimate. According to Dr. DeRamus, his estimate of lost enterprise value is equivalent to the present value of ZFM's future lost profits from the date of his report through perpetuity.

Dr. DeRamus used ArvinMeritor and Eaton as "comparables" to estimate the lost enterprise value of ZFM on a "but-for" basis. He defined enterprise value as the market value of equity plus total debt<sup>61</sup> and preferred equity, less the amount of cash and cash equivalents.<sup>62</sup> Dr. DeRamus used two multiples to estimate the enterprise value of ZFM, enterprise value ("EV") over earnings before interest and taxes ("EBIT") and EV over earnings before interest, taxes, depreciation, and amortization ("EBITDA"). Dr. DeRamus assumed that "but-for" operating profits were equivalent to EBIT and that "but-for" operating profits less depreciation were equivalent to EBITDA.<sup>63</sup> Dr. DeRamus estimated enterprise value to be \$233 million using the EV/EBITDA multiple and \$556 million using the EV/EBIT multiple. He then used the midpoint between them, \$394 million, as his estimate of lost enterprise value.

92. **Dr. DeRamus' Estimate of Enterprise Value Using the EV/EBITDA Multiple**Dr. DeRamus took the average EV/EBITDA multiple of ArvinMeritor and Eaton for the period 2005-2007, 64 7.68, and multiplied it by his estimate of the average EBITDA for ZFM for the years 2006, 2007, and 2008 and arrived at an estimate for enterprise value. To estimate EBITDA, Dr. DeRamus estimated the "but-for" incremental gross profit and subtracted the "but-

<sup>&</sup>lt;sup>61</sup> Dr. DeRamus did not specify if he used the book value or the market value of debt in his calculations.

<sup>&</sup>lt;sup>62</sup> Dr. DeRamus stated: "This definition of enterprise value is a standard definition that is often used in valuing companies for a broad range of business purposes." No explanation was given as to why this definition was appropriate for this damages claim. See DeRamus Report, at ¶307.

<sup>&</sup>lt;sup>63</sup> Depreciation is typically considered to be an operating expense that would be subtracted from revenues as one of the operating expenses used to derive EBIT, depreciation would typically be added back to EBIT to estimate EBITDA not subtracted.

<sup>&</sup>lt;sup>64</sup> Dr. DeRamus did not provide details of this calculation, it is not known if the average was based on daily weekly monthly or quarterly data. The enterprise value of the comparable companies would have been different on every day, typically such information is available quarterly when relying on publicly available financial accounting records.

 $<sup>^{65}</sup>$  EBITDA from table 11 were, \$51,443,243 for 2006, \$25,834,958 for 2007, and \$13,874,463 for 2008 . The average was \$30,384,221.

for" overhead costs (excluding depreciation). Dr. DeRamus summarized his estimates of EBITDA for ZFM in Table 11 of his report. Applying the 2005-2007 EBITDA multiple of 7.68 to Dr. DeRamus' estimate of EBITDA for each year yields the following estimates of enterprise value: \$394 million for 2006, \$198 million for 2007, and \$107 million for 2008 for an average of \$233 million.

- DeRamus took the average EV/EBIT multiple for the period 2005-2007<sup>66</sup>, 12.32 and multiplied it by his estimate of the average EBIT for ZFM for the years 2006, 2007 and 2008<sup>67</sup> and arrived at an estimate for enterprise value. To estimate EBIT, Dr. DeRamus used the lost profits from the approach based on Eaton's profitability in Section 11.10 that was summarized in Table 8 of his report. Dr. DeRamus claims that operating profit is a reasonable proxy for the EBIT.<sup>68</sup>
- 94. Applying the 2005-2007 EBIT multiple of 12.32 to Dr. DeRamus' estimate of EBIT for each year yields the following estimates of enterprise value: \$704 million for 2006, \$648 million for 2007 and \$314 million for 2008 for an average of \$556 million.
  - i. Dr. DeRamus' Estimate of Lost Enterprise Value is Highly Flawed
- 95. **Dr. DeRamus Uses the Wrong Time Period in His Analysis.** When using a "comparables" approach to valuation, the only relevant price is the price of the comparables as of the date of the valuation. (See IRS Revenue Ruling 59/60 Valuation of Stocks and Bonds.) Dr. DeRamus used the wrong time period in his comparables approach. Dr. DeRamus purported to

<sup>&</sup>lt;sup>66</sup> Dr. DeRamus did not provide details of this calculation, it is not known if the average was based on daily weekly monthly or quarterly data. The enterprise value of the comparable companies would have been different on every day, it is unlikely that Dr. DeRamus could have obtained information on the outstanding debt or the companies' EBITDA more often than quarterly if he used financial accounting records

<sup>&</sup>lt;sup>67</sup> EBIT for 2006, 2007 and 2008 from Table 12 were, \$57,169,679, \$52,629,045 \$25,480,539.

<sup>&</sup>lt;sup>68</sup> EBIT also includes non-operating revenues and expenses.

estimate the "but-for" value of ZFM as of February 2009, but used data from the comparable companies based on averages of those companies' stock prices and performance that covered the time period from 2005 through 2007. Further, Dr. DeRamus applied these multiples to his estimates of EBITDA and EBIT to still another incorrect time period, 2006 through 2008. It is very unclear for what time period, if any, this estimate on enterprise value is relevant, but it certainly does not provide a basis for estimating the enterprise value at the end of February 2009.

96. Dr. DeRamus used an "average" of the enterprise values using stock prices of his comparable companies, ArvinMeritor and Eaton, from the period 2005 through 2007. During this time period used by Dr. DeRamus to develop his "comparables" ratios of EV/EBITDA and EV/EBIT, the stock of ArvinMeritor was selling for approximately \$10 to \$20 per share or more than 15 to 30 times higher than its February 27, 2009 price of \$0.63. The market and the economy changed dramatically from the time period used by Dr. DeRamus to the time period of the valuation. By using the earlier and inappropriate time period, Dr. DeRamus overstated the potential value of ZFM. On February 27, 2009, the EV/EBITDA ratio for ArvinMeritor was approximately 4.5 using the EBITDA as of December 2008. <sup>69</sup> Dr. DeRamus projected a negative EBITDA of \$12 million for the first two months of 2009. Using a negative value for EBITDA would produce nonsensical results. The enterprise value as of February 27, 2009, using Dr. DeRamus' estimate of EBITDA for 2008 (\$13,874,463), along with the February 27, 2009 EV/EBITDA for ArvinMeritor, would provide an estimate of enterprise value of approximately \$58 million. On February 27, 2009, the EV/EBIT ratio for ArvinMeritor was approximately 5.6 using the EBIT as of September 2008.<sup>70</sup> The enterprise value for February 27, 2009 using Dr.

<sup>&</sup>lt;sup>69</sup> Yahoo Finance "Key Statistics" ArvinMeritor's (ARM)

<sup>&</sup>lt;sup>70</sup> EBIT through December 31 2008 for ArvinMeritor was -\$149 million, calculating a EV/EBIT ratio with a negative number would yield nonsensical results.

DeRamus' estimate of EBIT for 2008 (\$25,480,539) along with the February 27, 2009 EV/EBIT for ArvinMeritor, would provide an estimate of enterprise value of approximately \$143 million.

97. Dr. DeRamus also used Eaton as a comparable company. During the time period used by Dr. DeRamus, Eaton was selling for approximately \$53 to \$95 per share, however it was selling for only \$36.15 on February 27, 2009. On February 27, 2009 the EV/EBITDA ratio for Eaton was approximately 5.7 using the EBITDA as of December 2008.<sup>71</sup> The enterprise value as of February 27, 2009 using Dr. DeRamus' estimate of EBITDA for 2008 (\$13,874,463), along with the February 27, 2009 EV/EBITDA for Eaton Corporation, would provide an estimate of enterprise value of approximately \$79 million. On February 27, 2009 the EV/EBIT ratio for Eaton Corporation was approximately 7.4<sup>72</sup> using the EBIT as of September 2008. The enterprise value as of February 27, 2009 using Dr. DeRamus' estimate of EBIT for 2008 (\$25,480,539), along with the February 27, 2009 EV/EBIT for Eaton, would provide an estimate of enterprise value of approximately \$189 million.

98. In sum, the average EV/EBITDA using Dr. DeRamus' estimate of EBITDA was \$68.5 million<sup>73</sup> and the average EV/EBIT using Dr. DeRamus' estimate of EBIT was \$166 million.<sup>74</sup> After correcting for the time period error, the revised estimate of ZFM's enterprise value using Dr. DeRamus' assumptions and methodologies falls from \$374 million to \$117

<sup>&</sup>lt;sup>71</sup> Yahoo Finance "Key Statistics" Eaton Corporation (ETN), Enterprise value of Eaton was \$10.46 billion on February 27, 2009. EBITDA as of December 31, 2008 was \$1.83billion. EV/EBITDA = 10.46/1.83 = 5.7.

 $<sup>^{72}</sup>$  Yahoo Finance "Key Statistics" Eaton Corporation (ETN), Enterprise value of Eaton was \$10.46 billion on February 27, 2009. Yahoo Finance "Income Statement" EBIT as of September, 2008 was \$1.41 billion EV/EBIT. = EV/EBIT = 10.46/1.41 = 7.4

 $<sup>^{73}</sup>$ Enterprise value based on EV/EBITDA was \$58 million for ArvinMeritor and \$79 million for Eaton Corporation. (58+79)/2 = \$68.5 million.

 $<sup>^{74}</sup>$  Enterprise value based on EV/EBIT was \$143 million for ArvinMeritor and \$179 million for Eaton Corporation (143+189)/2=\$166 million

million.<sup>75</sup> I do not endorse the \$117 million as an appropriate measure of lost enterprise value because it is based on Dr. DeRamus' flawed methodology for calculating ZFM's but-for profits at the time of the valuation. Under the more likely outcome that ZFM is not financially viable in the but-for world, there is no lost enterprise value in February 2009.

- 99. **Dr. DeRamus Fails to Consider Capital Requirements**. Dr. DeRamus does not consider capital requirements when forecasting the lost profits used as a basis for estimating the lost enterprise value. Companies need to make investments in such things as plant, equipment, and working capital when they expand their business. Also ongoing businesses need to replace equipment that is worn out or becomes obsolete as time passes. Dr. DeRamus incorrectly assumes that ZFM could have approximately doubled its sales from 2000 to 2009 without making any additional investments or even replacing depreciated capital.
- 100. The additional investments that would be required, as well as the cost of obtaining the required capital, would need to be subtracted from the "but-for" enterprise value. By failing to consider the additional capital required to run the business and have it grow to the level assumed by Dr. DeRamus, plaintiffs are asking for a return on capital investments that were never made. Further, Dr. DeRamus has not demonstrated that there would in fact be any lost enterprise value if the capital requirements were properly considered.

<sup>&</sup>lt;sup>75</sup> \$117 million is the midpoint between \$166 million and \$68.5 million

\*\*\*

David S. Sibley
David S. Sibley

Executed March 17, 2009

 $\begin{array}{c} \text{Table 1} \\ \text{Eaton's Annual Rebates by Product} \\ \text{($ \text{Thousands)}}^{/1} \end{array}$ 

			]	Linehaul					Non-Linehaul			
Year		M	anual		Automa	ited	M	anual	Autor	mated		Total
	7s	9s & 10s	Lightning	Top 10	AutoShift 10s	UltraShift	13s & 18s	Top 13 & 18	AutoShift 15s	AutoShift 18s	Other	
1998	83.8	3,811.2	0.0	328.6	110.4	0.0	2,405.6	0.0	2,148.8	0.0	0.0	8,888.5
1999	81.0	2,575.6	0.5	89.9	376.3	0.0	1,864.8	0.0	1,432.6	0.0	0.0	6,420.6
2000	57.0	2,843.8	27.1	700.6	3,120.0	0.0	6,186.6	0.0	2,441.4	140.0	41.4	15,558.0
2001	64.9	2,061.1	105.1	628.2	4,432.1	0.0	7,277.4	0.0	2,948.0	198.6	95.3	17,810.7
2002	30.6	2,477.3	221.0	720.2	4,048.0	0.0	11,440.2	0.0	3,294.6	270.1	62.4	22,564.4
2003	15.2	1,704.8	745.5	0.0	3,408.3	144.0	9,052.1	0.0	2,821.0	649.0	44.0	18,583.9
2004	29.4	3,523.2	913.9	0.0	2,159.5	2,594.6	13,555.1	0.0	3,726.4	1,160.0	45.7	27,707.7
2005	10.5	4,446.7	550.0	0.0	2,706.4	5,600.6	18,560.5	0.0	4,307.3	1,872.1	41.9	38,096.1
2006	12.1	5,866.4	150.3	0.0	3,230.7	7,600.4	20,635.3	0.0	2,153.7	2,864.4	0.0	42,513.3
2007	1.3	1,823.8	0.0	0.0	1,117.2	2,980.1	11,817.8	0.0	1,856.1	3,920.4	0.0	23,516.6

<sup>&</sup>lt;sup>/1</sup> Based on penetration estimates reported in Dr. DeRamus' Report and rebate provisions in Eaton's LTAs.

Table 2 **EQUALLY EFFICIENT COMPETITOR TEST** Break-Even Average Variable Cost to Gross Price Ratio AT FREIGHTLINER, INTERNATIONAL, PACCAR, AND VOLVO/MACK

	[1]	[2]	[3]	[4] = [3] / [2]	[5] = [1] - [4]	[6] = [5] / [1]	[7]
Year	Avg Gross Price of Eaton Linehaul Transmissions <sup>/1</sup> (\$)	Quantity of Eaton Linehaul Transmissions Sold <sup>/2</sup>	Total Rebates Offered by Eaton Across All Transmission Products '3 (\$)	Avg Rebate per Eaton Linehaul Transmission (\$)	Avg Price of Eaton Linehaul Transmission Less per Unit Rebate (\$)	Break-Even AVC to Gross Price Ratio <sup>/4</sup>	Eaton AVC to Gross Price Ratio <sup>/5</sup>
1998	2,893	76,990	8,888,493	115	2,777	0.96	n.a.
1999	3,001	100,535	6,420,633	64	2,937	0.98	0.78
2000	3,221	84,989	15,558,012	183	3,038	0.94	0.77
2001	3,154	48,493	17,810,691	367	2,786	0.88	0.79
2002	3,086	61,526	22,564,397	367	2,719	0.88	0.73
2003	3,032	72,302	18,583,949	257	2,774	0.92	0.74
2004	3,069	118,887	27,707,700	233	2,836	0.92	0.75
2005	3,201	151,923	38,096,124	251	2,950	0.92	0.74
2006	3,356	168,420	42,513,316	252	3,103	0.92	0.71
1999-2006	3,164	807,075	189,254,822	234	2,930	0.93	0.75

Based on comparable manual and automated transmissions (manual 9s & 10s; AutoShift 10s; and UltraShift 10s).
Based on comparable manual and automated transmissions (manual 9s & 10s; AutoShift 10s; and UltraShift 10s).

Based on all manual, automated, and vocational transmissions (manual 7s, 9s, 10s, 13s, & 18s; Lightning series; Top 10, 13, & 18; AutoShift 10s, 15s, & 18s; and UltraShift 10s), and other.

<sup>&</sup>lt;sup>4</sup> Estimated based on penetration estimates reported by DeRamus and OEM contract provisions.

A value below the break-even estimate passes the equally efficient competitor test. Bold values in Column 7 indicate that the test is passed.

TABLE 3 **EQUALLY EFFICIENT COMPETITOR TEST** Break-Even Average Variable Cost to Gross Price Ratio AT FREIGHTLINER

	[1]	[2]	[3]	[4] = [3] / [2]	[5] = [1] - [4]	[6] = [5] / [1]	[7]
Year	Avg Gross Price of Eaton Linehaul Transmissions <sup>/1</sup> (\$)	Quantity of Eaton Linehaul Transmissions Sold <sup>/2</sup>	Total Rebates Offered by Eaton Across All Transmission Products '3 (\$)	Avg Rebate per Eaton Linehaul Transmission (\$)	Avg Price of Eaton Linehaul Transmission Less per Unit Rebate (\$)	Break-Even AVC to Gross Price Ratio <sup>/4</sup>	Eaton AVC to Gross Price Ratio <sup>/5</sup>
1998	3,009	26,336	0	0	3,009	1.00	n.a.
1999	3,062	36,256	0	0	3,062	1.00	0.83
2000	3,436	32,695	7,153,891	219	3,218	0.94	0.78
2001	3,319	18,094	10,676,403	590	2,729	0.82	0.85
2002	3,123	25,644	14,377,295	561	2,562	0.82	0.75
2003	3,038	36,104	12,850,981	356	2,682	0.88	0.78
2004	3,037	53,341	16,786,319	315	2,722	0.90	0.78
2005	3,096	68,105	24,111,857	354	2,742	0.89	0.78
2006	3,255	70,414	24,352,165	346	2,909	0.89	0.74
1999-2006	3,156	340,653	110,308,912	324	2,833	0.90	0.78

Based on comparable manual and automated transmissions (manual 9s & 10s; AutoShift 10s; and UltraShift 10s).
Based on comparable manual and automated transmissions (manual 9s & 10s; AutoShift 10s; and UltraShift 10s).

Based on all manual, automated, and vocational transmissions (manual 7s, 9s, 10s, 13s, & 18s; Lightning series; Top 10, 13, & 18; AutoShift 10s, 15s, & 18s; and UltraShift 10s), and other.

Estimated based on penetration estimates reported by DeRamus and OEM contract provisions.

A value below the break-even estimate passes the equally efficient competitor test. Bold values in Column 7 indicate that the test is passed.

Table 4 **EQUALLY EFFICIENT COMPETITOR TEST** Break-Even Average Variable Cost to Gross Price Ratio AT INTERNATIONAL

	[1]	[2]	[3]	[4] = [3] / [2]	[5] = [1] - [4]	[6] = [5] / [1]	[7]
Year	Avg Gross Price of Eaton Linehaul Transmissions <sup>/1</sup> (\$)	Quantity of Eaton Linehaul Transmissions Sold <sup>/2</sup>	Total Rebates Offered by Eaton Across All Transmission Products '3 (\$)	Avg Rebate per Eaton Linehaul Transmission (\$)	Avg Price of Eaton Linehaul Transmission Less per Unit Rebate (\$)	Break-Even AVC to Gross Price Ratio <sup>/4</sup>	Eaton AVC to Gross Price Ratio <sup>/5</sup>
1998	2,638	17,761	0	0	2,638	1.00	n.a.
1999	2,736	19,702	0	0	2,736	1.00	0.78
2000	2,834	14,972	145,171	10	2,824	1.00	0.81
2001	2,804	9,890	208,922	21	2,782	0.99	0.78
2002	2,777	9,629	0	0	2,777	1.00	0.74
2003	2,743	10,444	343,625	33	2,710	0.99	0.71
2004	2,941	24,575	1,362,635	55	2,885	0.98	0.75
2005	3,287	33,876	2,581,013	76	3,211	0.98	0.73
2006	3,381	41,691	5,493,316	132	3,250	0.96	0.70
1999-2006	3,059	164,779	10,134,682	62	2,997	0.98	0.74

Based on comparable manual and automated transmissions (manual 9s & 10s; AutoShift 10s; and UltraShift 10s).
Based on comparable manual and automated transmissions (manual 9s & 10s; AutoShift 10s; and UltraShift 10s).

Based on all manual, automated, and vocational transmissions (manual 7s, 9s, 10s, 13s, & 18s; Lightning series; Top 10, 13, & 18; AutoShift 10s, 15s, & 18s; and UltraShift 10s), and other.

Estimated based on penetration estimates reported by DeRamus and OEM contract provisions.

A value below the break-even estimate passes the equally efficient competitor test. Bold values in Column 7 indicate that the test is passed.

Table 5 **EQUALLY EFFICIENT COMPETITOR TEST** Break-Even Average Variable Cost to Gross Price Ratio AT PACCAR

	[1]	[2]	[3]	[4] = [3] / [2]	[5] = [1] - [4]	[6] = [5] / [1]	[7]
Year	Avg Gross Price of Eaton Linehaul Transmissions <sup>/1</sup> (\$)	Quantity of Eaton Linehaul Transmissions Sold <sup>/2</sup>	Total Rebates Offered by Eaton Across All Transmission Products '3 (\$)	Avg Rebate per Eaton Linehaul Transmission (\$)	Avg Price of Eaton Linehaul Transmission Less per Unit Rebate (\$)	Break-Even AVC to Gross Price Ratio <sup>/4</sup>	Eaton AVC to Gross Price Ratio <sup>/5</sup>
1998	3,023	17,062	0	0	3,023	1.00	n.a.
1999	3,122	22,815	0	0	3,122	1.00	0.73
2000	3,183	16,992	2,514,914	148	3,035	0.95	0.71
2001	3,083	10,304	3,735,698	363	2,720	0.88	0.73
2002	3,128	14,123	5,243,165	371	2,757	0.88	0.67
2003	3,174	14,758	4,232,741	287	2,887	0.91	0.67
2004	3,248	22,497	7,794,877	346	2,902	0.89	0.70
2005	3,375	26,344	9,719,981	369	3,006	0.89	0.68
2006	3,486	30,411	11,138,140	366	3,120	0.89	0.67
1999-2006	3,262	158,244	44,379,514	280	2,981	0.91	0.69

Based on comparable manual and automated transmissions (manual 9s & 10s; AutoShift 10s; and UltraShift 10s).
Based on comparable manual and automated transmissions (manual 9s & 10s; AutoShift 10s; and UltraShift 10s).

Based on all manual, automated, and vocational transmissions (manual 7s, 9s, 10s, 13s, & 18s; Lightning series; Top 10, 13, & 18; AutoShift 10s, 15s, & 18s; and UltraShift 10s), and other.

<sup>&</sup>lt;sup>4</sup> Estimated based on penetration estimates reported by DeRamus and OEM contract provisions.

A value below the break-even estimate passes the equally efficient competitor test. Bold values in Column 7 indicate that the test is passed.

Table 6 **EQUALLY EFFICIENT COMPETITOR TEST** BREAK-EVEN AVERAGE VARIABLE COST TO GROSS PRICE RATIO AT VOLVO/MACK

	[1]	[2]	[3]	[4] = [3] / [2]	[5] = [1] - [4]	[6] = [5] / [1]	[7]
Year	Avg Gross Price of Eaton Linehaul Transmissions <sup>/1</sup> (\$)	Quantity of Eaton Linehaul Transmissions Sold <sup>/2</sup>	Total Rebates Offered by Eaton Across All Transmission Products '3 (\$)	Avg Rebate per Eaton Linehaul Transmission (\$)	Avg Price of Eaton Linehaul Transmission Less per Unit Rebate (\$)	Break-Even AVC to Gross Price Ratio <sup>/4</sup>	Eaton AVC to Gross Price Ratio <sup>/5</sup>
1998	2,844	15,831	8,888,493	561	2,283	0.80	n.a.
1999	3,014	21,762	6,420,633	295	2,719	0.90	0.75
2000	3,191	20,330	5,744,036	283	2,908	0.91	0.76
2001	3,271	10,205	3,189,668	313	2,958	0.90	0.76
2002	3,203	12,130	2,943,938	243	2,961	0.92	0.73
2003	3,092	10,996	1,156,602	105	2,987	0.97	0.71
2004	3,114	18,474	1,763,869	95	3,019	0.97	0.73
2005	3,183	23,598	1,683,273	71	3,111	0.98	0.72
2006	3,438	25,904	1,529,695	59	3,379	0.98	0.71
1999-2006	3,197	143,399	24,431,715	170	3,026	0.95	0.73

Based on comparable manual and automated transmissions (manual 9s & 10s; AutoShift 10s; and UltraShift 10s).
Based on comparable manual and automated transmissions (manual 9s & 10s; AutoShift 10s; and UltraShift 10s).

Based on all manual, automated, and vocational transmissions (manual 7s, 9s, 10s, 13s, & 18s; Lightning series; Top 10, 13, & 18; AutoShift 10s, 15s, & 18s; and UltraShift 10s), and other.

Estimated based on penetration estimates reported by DeRamus and OEM contract provisions.

A value below the break-even estimate passes the equally efficient competitor test. Bold values in Column 7 indicate that the test is passed.

Table 7 COMPARISON OF EATON AND ZFM AVERAGE OPERATING COST (2005-2007)

	[1]	[2]	$[3] = [2] \times (1 - [1])$
Product	Operating Profit <sup>/1</sup>	Average Price <sup>/2</sup> (\$)	Average Operating Cost (\$)
Eaton			
Manual 9 and 10	24.4%	2,961	2,239
AutoShift	24.4%	5,093	3,851
UltraShift	24.4%	5,475	4,140
Weighted average	24.4%	3,279	2,479
ZFM			
G Platform	4.0%	3,051	2,929
FreedomLine	4.0%	6,877	6,602
Weighted average	4.0%	4,299	4,127

Eaton operating profit based on NAFTA HD Consolidated P&L. ZFM operating profit based on DeRamus Report p. 46 at ¶ 110.

Equals observed gross price based on Eaton and Meritor transaction data.

 $\begin{array}{c} \text{Table 8} \\ \text{Comparison of Eaton's and ZFM's Average Variable Cost} \\ \text{(FY 2001-2005)} \end{array}$ 

Product	Average Variable Cost (\$ per unit)
Eaton <sup>/1</sup>	
Manual 9 and 10	1,953
AutoShift	3,363
UltraShift	3,510
ZFM <sup>/2</sup>	
G Platform	2,416
FreedomLine	4,004

Based on manufacturing costs plus distribution expenses shown in Eaton's NAFTA HD Consolidated P&L.

Variable cost = [(Standard Costs + Total Variances + Distribution Exp) / Total Sales] x Eaton's average price.

Based on DeRamus Report Tables 5 and 6.

TABLE 9
RESULTS OF ECONOMETRIC MODEL

No. of Observations: 143  $F_{(11, 131)}$ : 210.39 R-Squared: 0.9619

Variable	Coefficient	Coefficient When Interacted with Conduct Variable		
Leavelle Olle Date	0.667	0.224		
Lagged Log-Odds Ratio	(0.000)	(0.083)		
Total ZFM and Eaton Linehaul	0.133	0.167		
Transmissions	(0.072)	(0.326)		
Consumer Confidence	-0.007	0.002		
Consumer Confidence	(0.060)	(0.731)		
Oil Price	-0.022	0.002		
Oll Price	(0.025)	(0.890)		
Interest Rate	0.108	0.006		
interest Rate	(0.125)	(0.955)		
Constant	0.135	-0.160		
Constant	(0.714)	(0.700)		

Notes:

P-values in parentheses.

Conduct variable equals zero before July 2000 and 1 afterwards.

# 

 ${\it Table 10}$  ZF Meritor's Incremental Revenue Based on Econometric Estimate of ZF Meritor's But-For Shares

Line	Incremental revenue	FY 2000 (since July)	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009 (through February)	Total 2000 - 2009
				E	But-for Shares from	Econometric Mode	el					
1	ZFM share of all ZFM and Eaton linehaul transmissions	19.8%	15.6%	22.3%	16.6%	12.5%	6.5%	3.6%	3.6%	3.6%	3.6%	NA
2	Ratio of automated to manual transmissions in SBP	0.0	0.2	0.4	0.8	0.8	1.0	1.0	1.0	1.0	1.0	NA
3	Share of ZF Meritor manual transmissions	19.8%	13.3%	15.7%	9.3%	6.9%	3.3%	1.8%	1.8%	1.8%	1.8%	NA
4	Share of ZF Meritor FreedomLine transmissions	0.0%	2.3%	6.6%	7.3%	5.6%	3.2%	1.8%	1.8%	1.8%	1.8%	NA
					Manual Transmis	sions (G Platform)						
5	ZF Meritor's forecasted share (L. 3)	19.8%	13.3%	15.7%	9.3%	6.9%	3.3%	1.8%	1.8%	1.8%	1.8%	NA
6	Actual total number of ZFM and Eaton linehaul transmissions	23,188	68,762	77,993	80,037	119,681	161,589	173,922	101,014	68,573	28,572	903,330
7	But-for units based on actual number of ZFM and Eaton linehaul transmissions (L. 5 * L. 6)	4,581	9,126	12,238	7,409	8,246	5,311	3,148	1,835	1,246	519	53,659
8	Actual units	5,445	17,124	19,194	10,599	9,374	7,704	6,909	1,517	-	-	77,866
9	Incremental units in but-for world (L. 7 - L. 8)	-	-	-	-	-	-	-	318	1,246	519	2,083
10	Average but-for price (in SBP)	\$ 3,418	\$ 3,418	\$ 3,519	\$ 3,776	\$ 3,663	\$ 3,650	\$ 3,650	\$ 3,650	\$ 3,650	\$ 3,650	NA
11	Incremental revenue in but-for world (L. 9 * L. 10)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,160,697	\$ 4,546,652	\$ 1,894,438	\$ 7,601,787
				A	utomated Transmis	ssions (FreedomLir	ne)					
12	ZF Meritor's forecasted share (L. 4)	0.0%	2.3%	6.6%	7.3%	5.6%	3.2%	1.8%	1.8%	1.8%	1.8%	NA
13	Actual total number of ZFM and Eaton linehaul transmissions	23,188	68,762	77,993	80,037	119,681	161,589	173,922	101,014	68,573	28,572	903,330
14	But-for units based on actual number of ZFM and Eaton linehaul transmissions (L. 12 * L. 13)	-	1,604	5,152	5,849	6,745	5,225	3,096	1,805	1,225	511	31,211
15	Actual units	-	62	513	3,511	1,443	-	-	-	-	-	5,529
16	Incremental units in but-for world (L. 14 - L. 15)	-	1,542	4,639	2,338	5,302	5,225	3,096	1,805	1,225	511	25,682
17	Average but-for price (in SBP)	NA	\$ 4,687	\$ 5,135	\$ 4,942	\$ 4,927	\$ 4,920	\$ 4,920	\$ 4,920	\$ 4,920	\$ 4,920	NA
18	Incremental revenue in but-for world (L. 16 * L. 17)	\$ -	\$ 7,225,798	\$ 23,822,748	\$ 11,552,073	\$ 26,122,461	\$ 25,705,541	\$ 15,233,998	\$ 8,880,806	\$ 6,028,660	\$ 2,511,942	\$ 127,084,026
	Total incremental revenue in but-for world (L. 11 + L. 18)	\$ -	\$ 7,225,798	\$ 23,822,748	\$ 11,552,073	\$ 26,122,461	\$ 25,705,541	\$ 15,233,998	\$ 10,041,503	\$ 10,575,312	\$ 4,406,380	\$ 134,685,814

# 

 ${\it Table 10} \\ {\it ZF Meritor's Incremental Costs Based on Econometric Estimate of ZF Meritor's But-For Shares}$ 

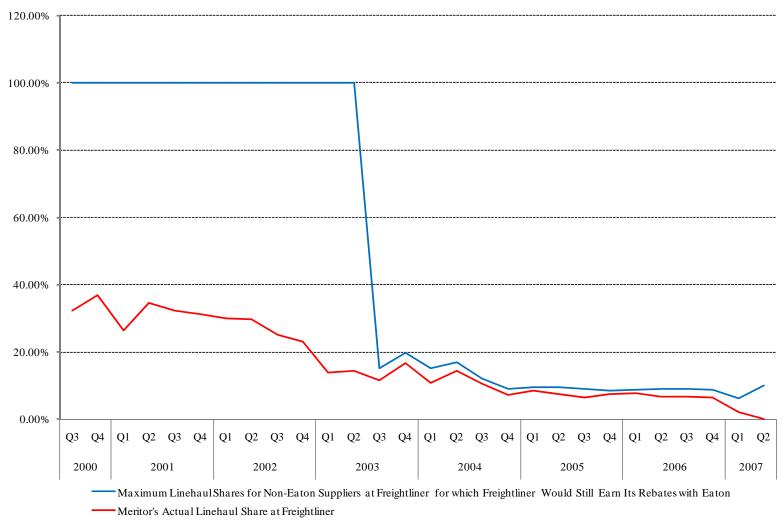
Line	Incremental cost	FY 2000 (since July)	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009 (through February)	Total 2000 - 2009
					Manual	Transmissions (G P	latform)					
1	Manufacturing cost (standard cost + variances)	NA	\$ 54,295,000	\$ 56,193,000	\$ 48,269,000	\$ 66,881,000	\$ 73,256,000	\$ 73,256,000	\$ 73,256,000	\$ 73,256,000	\$ 30,523,333	\$ 549,185,333
2	Burden (including depreciation)	NA	\$ 14,993,000	\$ 14,150,000	\$ 11,460,000	\$ 15,242,000	\$ 16,220,000	\$ 16,220,000	\$ 16,220,000	\$ 16,220,000	\$ 6,758,333	\$ 127,483,333
3	Percentage of burden that is fixed	NA	70%	88%	87%	76%	78%	78%	78%	78%	78%	. NA
4	Fixed burden (L. 2 * L. 3)	NA	\$ 10,566,477	\$ 12,501,833	\$ 10,005,697	\$ 11,658,716	\$ 12,708,807	\$ 12,708,807	\$ 12,708,807	\$ 12,708,807	\$ 5,295,336	\$ 100,863,286
5	of which Depreciation	NA	\$ 3,214,177	\$ 4,715,592	\$ 4,436,199	\$ 3,912,790	\$ 2,571,526	\$ 2,571,526	\$ 2,571,526	\$ 2,571,526	\$ 1,071,469	\$ 27,636,332
6	Variable cost (L. 1 - L. 4)	NA	\$ 43,728,523	\$ 43,691,167	\$ 38,263,303	\$ 55,222,284	\$ 60,547,193	\$ 60,547,193	\$ 60,547,193	\$ 60,547,193	\$ 25,227,997	\$ 448,322,047
7	Forecasted units in SBP	NA	19,348	19,001	15,202	22,008	24,399	24,399	24,399	24,399	10,166	183,321
8	Forecasted per unit variable cost (L. 6 / L. 7)	\$ 2,260	\$ 2,260	\$ 2,299	\$ 2,517	\$ 2,509	\$ 2,482	\$ 2,482	\$ 2,482	\$ 2,482	\$ 2,482	\$ 2,446
9	Incremental units (From L. 8 in Table 1)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 318	\$ 1,246	\$ 519	2,083
10	Incremental variable cost (L. 8 * L. 9)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 789,141	\$ 3,091,202	\$ 1,288,001	\$ 5,168,344
					Automated	Transmissions (Fre	edomLine)					
11	Manufacturing cost (standard cost + variances)	NA	\$ 18,829,000	\$ 36,936,000	\$ 51,557,000	\$ 75,611,000	\$ 100,849,000	\$ 100,849,000	\$ 100,849,000	\$ 100,849,000	\$ 42,020,417	\$ 628,349,417
12	Burden (including depreciation)	NA	\$ 855,000	\$ 4,327,000	\$ 5,558,000	\$ 6,959,000	\$ 9,344,000	\$ 9,344,000	\$ 9,344,000	\$ 9,344,000	\$ 3,893,333	\$ 58,968,333
13	Percentage of burden that is fixed	NA	70%	88%	87%	76%	78%	78%	78%	78%	78%	, NA
14	Fixed burden (L. 12 * L.13)	NA	\$ 602,570	\$ 3,822,999	\$ 4,852,676	\$ 5,322,989	\$ 7,321,276	\$ 7,321,276	\$ 7,321,276	\$ 7,321,276	\$ 3,050,532	\$ 46,936,868
15	of which Depreciation	NA	\$ 564,823	\$ 1,985,408	\$ 3,501,801	\$ 3,200,210	\$ 2,529,474	\$ 2,529,474	\$ 2,529,474	\$ 2,529,474	\$ 1,053,947	\$ 20,424,085
16	Variable cost (L. 11 - L. 14)	NA	\$ 18,226,430	\$ 33,113,001	\$ 46,704,324	\$ 70,288,011	\$ 93,527,724	\$ 93,527,724	\$ 93,527,724	\$ 93,527,724	\$ 38,969,885	\$ 581,412,549
17	Forecasted units in SBP	NA	3,400	8,000	12,000	18,000	24,000	24,000	24,000	24,000	10,000	147,400
18	Forecasted per unit variable cost (L. 16 / L. 17)	\$ 5,361	\$ 5,361	\$ 4,139	\$ 3,892	\$ 3,905	\$ 3,897	\$ 3,897	\$ 3,897	\$ 3,897	\$ 3,897	\$ 3,944
19	Incremental units (From L. 18 in Table 1)	-	1,542	4,639	2,338	5,302	5,225	3,096	1,805	1,225	511	25,682
20	Incremental variable cost	\$ -	\$ 8,264,857	\$ 19,203,065	\$ 9,098,343	\$ 20,702,166	\$ 20,360,092	\$ 12,066,099	\$ 7,034,049	\$ 4,775,004	\$ 1,989,585	\$ 103,493,260
21	Total incremental variable cost	\$ -	\$ 8,264,857	\$ 19,203,065	\$ 9,098,343	\$ 20,702,166	\$ 20,360,092	\$ 12,066,099	\$ 7,823,190	\$ 7,866,207	\$ 3,277,586	\$ 108,661,605

# 

 ${\it Table 10}$  ZF Meritor's Incremental Profit Based on Econometric Estimate of ZF Meritor's But-For Shares

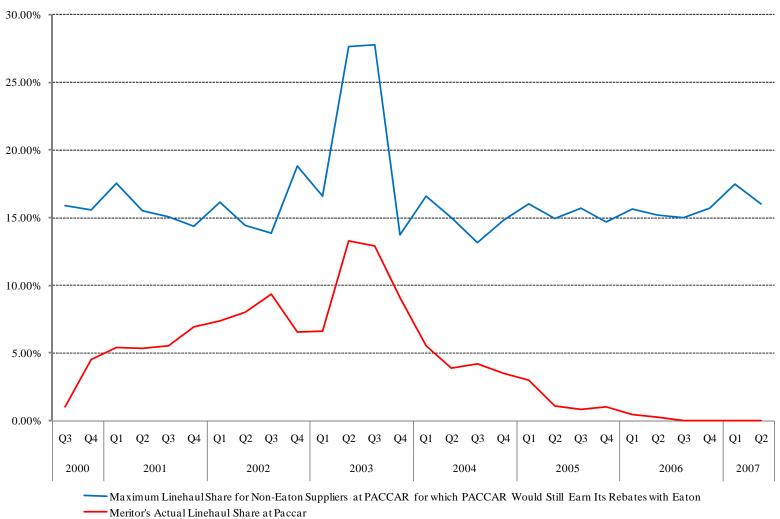
Line	Incremental gross profit	FY 2 (since	:000 July)	FY 2001	FY 2002	FY 2003		FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009 (through February)	Total 2000 - 2009
	Incremental profits in current dollars													
1	Incremental revenue	\$	-	\$ 7,225,798	\$ 23,822,748	\$ 11,552,07	3 \$	26,122,461	\$ 25,705,541	\$ 15,233,998	\$ 10,041,503	\$ 10,575,312	\$ 4,406,380	\$ 134,685,814
2	Incremental variable cost	\$	-	\$ 8,264,857	\$ 19,203,065	\$ 9,098,34	3 \$	20,702,166	\$ 20,360,092	\$ 12,066,099	\$ 7,823,190	\$ 7,866,207	\$ 3,277,586	\$ 108,661,605
3	Incremental gross profit in current dollars (L. 1 - L. 2)	\$	-	\$ -	\$ 4,619,684	\$ 2,453,73	\$0 \$	5,420,295	\$ 5,345,449	\$ 3,167,899	\$ 2,218,313	\$ 2,709,105	\$ 1,128,794	\$ 27,063,268
						Incremental pro	ofits in	2009 dollars						
4	Incremental profits in 2009 dollars (Risk free rate)	\$	-	\$ -	\$ 6,477,880	\$ 3,119,96	50 \$	6,750,064	\$ 6,358,688	\$ 3,677,230	\$ 2,456,237	\$ 2,837,890	\$ 1,135,858	\$ 32,813,808
5	Incremental profits in 2009 dollars (ArvinMeritor cost of debt)	\$	-	\$ -	\$ 7,545,675	\$ 3,667,67	5 \$	7,617,496	\$ 7,298,911	\$ 4,247,036	\$ 2,699,468	\$ 2,943,183	\$ 1,145,038	\$ 37,164,483

FIGURE 1
MERITOR'S POTENTIAL AND ACTUAL LINEHAUL TRANSMISSION BUSINESS AT FREIGHTLINER



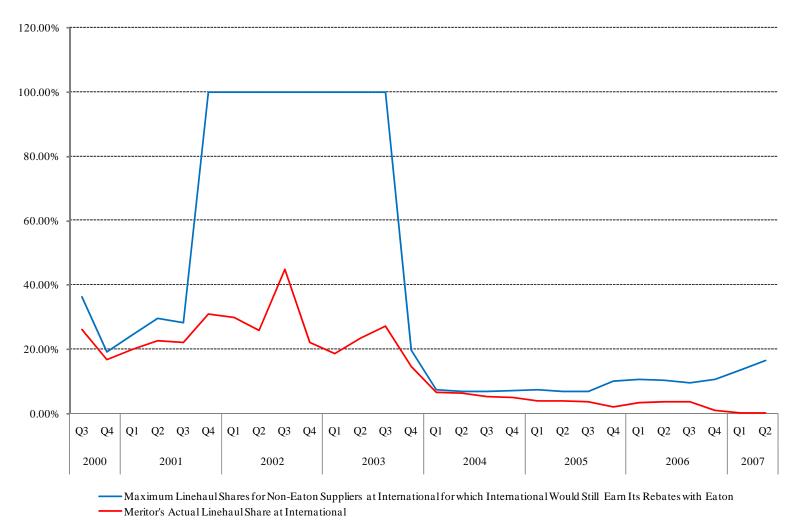
Sources: Penetration estimates reported in Dr. DeRamus' Report; rebate provisions in Eaton's LTAs.

FIGURE 2
MERITOR'S POTENTIAL AND ACTUAL LINEHAUL TRANSMISSION BUSINESS AT PACCAR



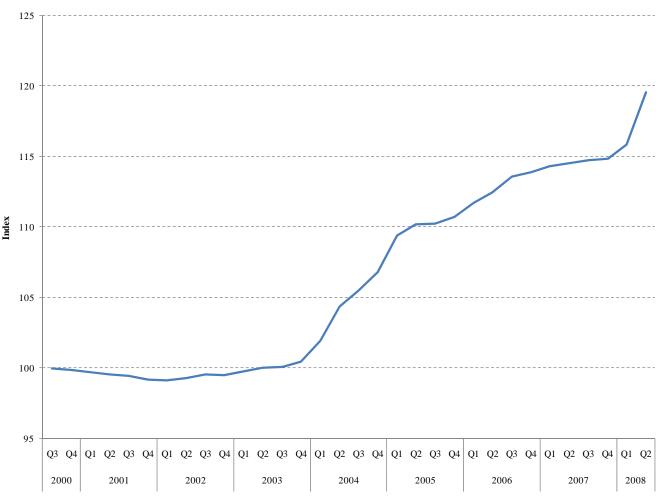
Sources: Penetration estimates reported in Dr. DeRamus' Report; rebate provisions in Eaton's LTAs.

FIGURE 3
MERITOR'S POTENTIAL AND ACTUAL LINEHAUL TRANSMISSION BUSINESS AT INTERNATIONAL



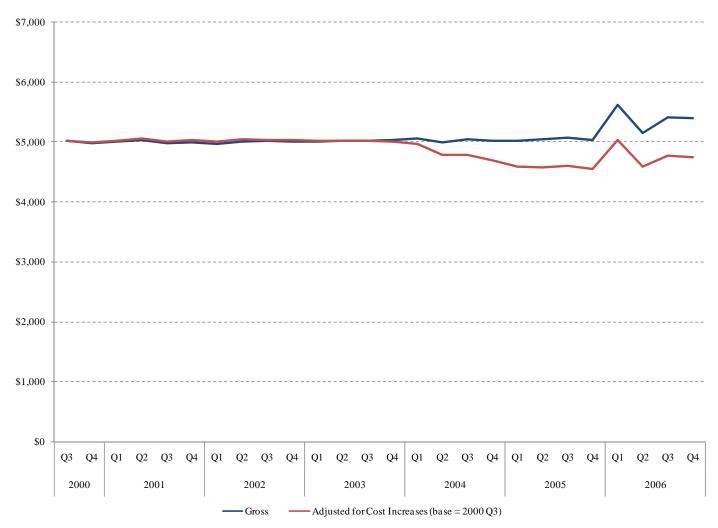
Sources: Penetration estimates reported in Dr. DeRamus' Report; rebate provisions in Eaton's LTAs.

FIGURE 4
QUARTERLY TRANSMISSION COST INDEX



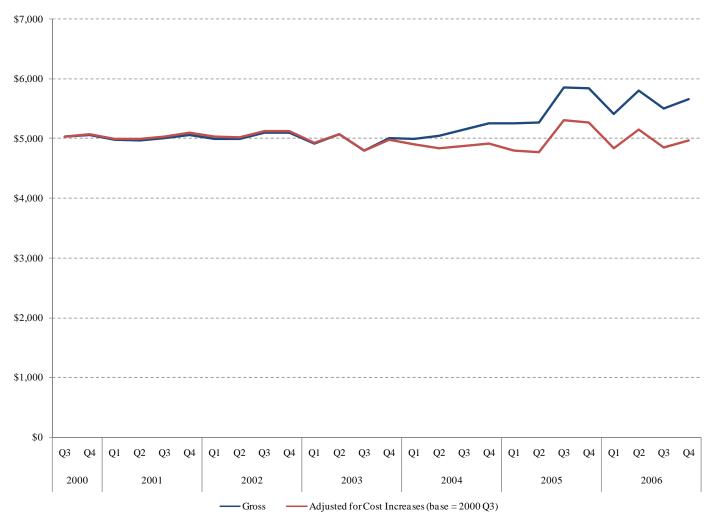
Sources: BLS Data, <a href="http://www.bls.gov">http://www.bls.gov</a>; Eaton LTAs (EATON-00382048; EATON-00385583; EATON-01110890); EATON-00254694.

FIGURE 5
AVERAGE PRICE OF AUTOSHIFT AT FREIGHTLINER



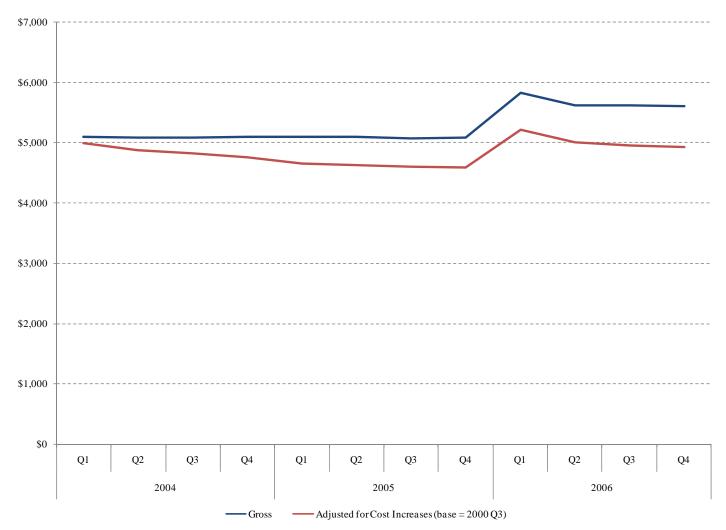
Sources: BLS Data, <a href="http://www.bls.gov">http://www.bls.gov</a>; workpapers of Dr. DeRamus (Fig 24-28 Eaton average price charts.xls).

FIGURE 6
AVERAGE PRICE OF AUTOSHIFT AT INTERNATIONAL



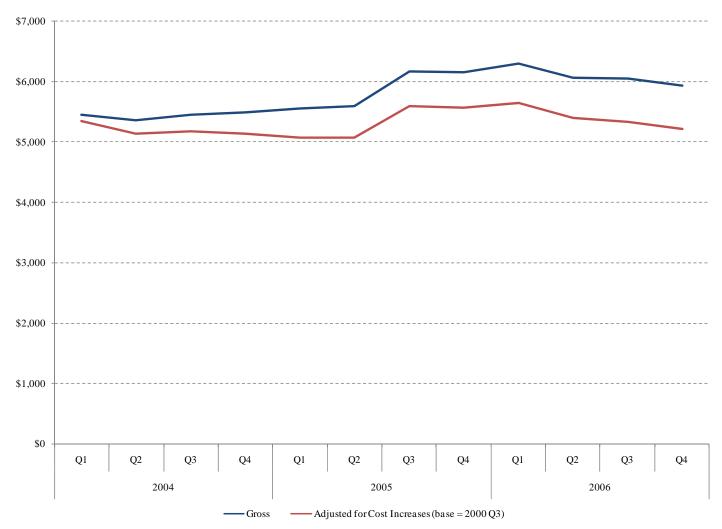
Sources: BLS Data, <a href="http://www.bls.gov">http://www.bls.gov</a>; workpapers of Dr. DeRamus (Fig 24-28 Eaton average price charts.xls).

FIGURE 7
AVERAGE PRICE OF ULTRASHIFT AT FREIGHTLINER



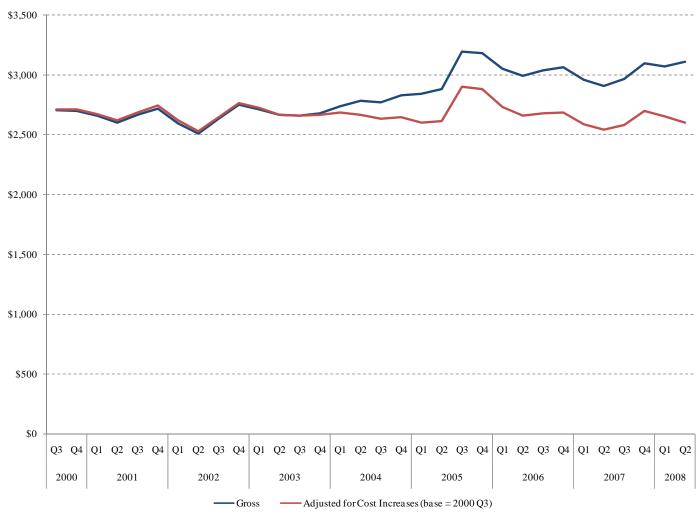
Sources: BLS Data, <a href="http://www.bls.gov">http://www.bls.gov</a>; workpapers of Dr. DeRamus (Fig 24-28 Eaton average price charts.xls).

FIGURE 8
AVERAGE PRICE OF ULTRASHIFT AT INTERNATIONAL



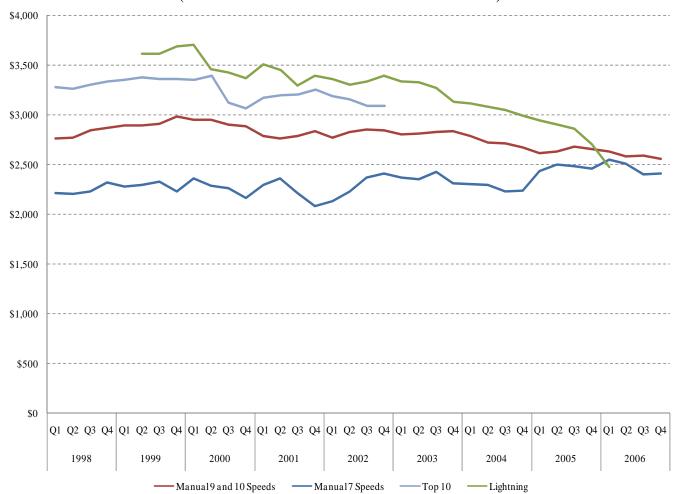
Sources: BLS Data, <a href="http://www.bls.gov">http://www.bls.gov</a>; workpapers of Dr. DeRamus (Fig 24-28 Eaton average price charts.xls)

FIGURE 9
AVERAGE PRICE OF EATON LINEHAUL MANUAL TRANSMISSIONS AT INTERNATIONAL



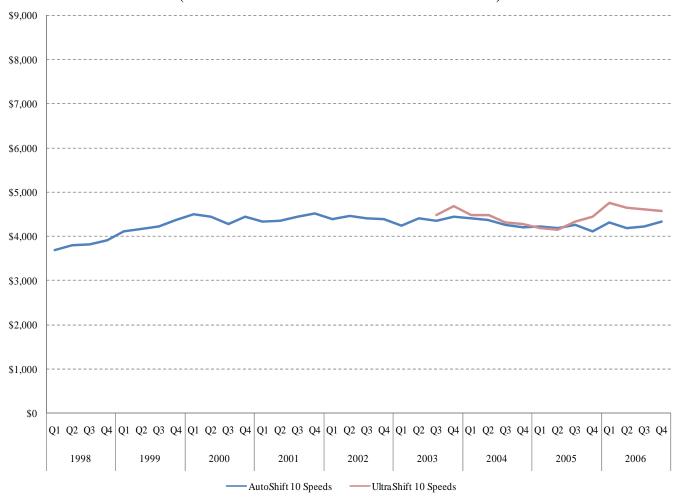
Sources: BLS Data, <a href="http://www.bls.gov">http://www.bls.gov</a>; workpapers of Dr. DeRamus (Fig 24-28 Eaton average price charts.xls)

FIGURE 10
AVERAGE PRICE OF EATON MANUAL LINEHAUL TRANSMISSIONS: NAFTA
(INCLUDING DISCOUNTS AND COST ADJUSTMENTS)



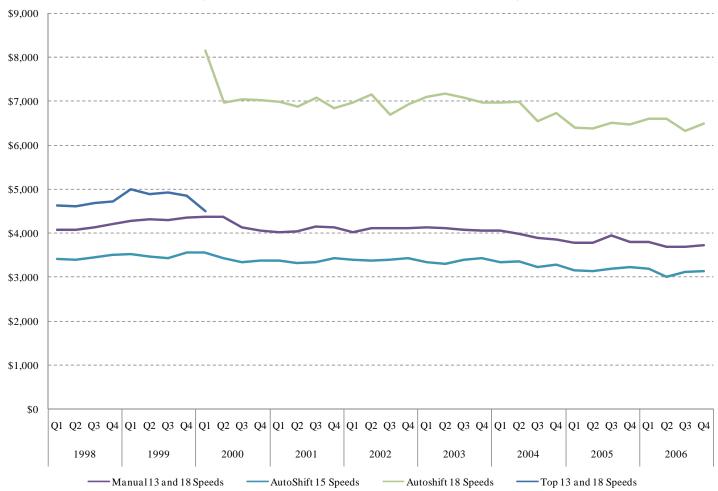
Sources: Penetration estimates reported in Dr. DeRamus' Report; cost increase and rebate provisions in Eaton's LTAs; BLS Data, <a href="http://www.bls.gov">http://www.bls.gov</a>; Eaton transaction data.

FIGURE 11
AVERAGE PRICE OF EATON AUTOMATED LINEHAUL TRANSMISSIONS: NAFTA
(INCLUDING DISCOUNTS AND COST ADJUSTMENTS)



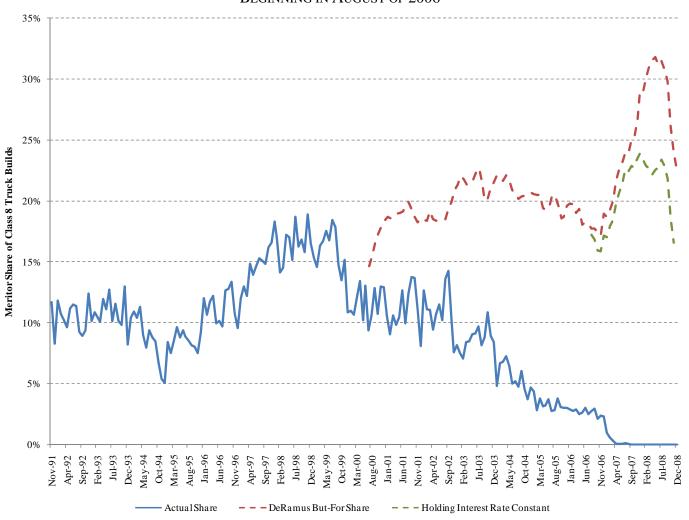
Sources: Penetration estimates reported in Dr. DeRamus' Report; cost increase and rebate provisions in Eaton's LTAs; BLS Data, <a href="http://www.bls.gov">http://www.bls.gov</a>; Eaton transaction data.

FIGURE 12
AVERAGE PRICE OF EATON VOCATIONAL TRANSMISSIONS: NAFTA
(INCLUDING DISCOUNTS AND COST ADJUSTMENTS)



Sources: Penetration estimates reported in Dr. DeRamus' Report; cost increase and rebate provisions in Eaton's LTAs; BLS Data, <a href="http://www.bls.gov">http://www.bls.gov</a>; Eaton transaction data.

FIGURE 13
ZF MERITOR BUT-FOR SHARE HOLDING INTEREST RATE CONSTANT
BEGINNING IN AUGUST OF 2006



Sources: workpapers of Dr. DeRamus (Data.dta; smearing butfor.xls).

# APPENDIX ONE

 $\label{eq:curiculum Vitae of David S. Sibley}$  and List of Prior Testimony within the Past Four Years

### DAVID S. SIBLEY

Professor, Department of Economics University of Texas at Austin Austin, TX 78712 Phone: (512) 475-8545

### **Education:**

1969 B. A. in Economics, Stanford University1973 Ph.D. in Economics, Yale University

# **Teaching Fields:**

Graduate and undergraduate courses in industrial organization, including topics covering antitrust and regulation.

#### **Research Fields:**

Vertical restrictions, including bundling and tying; vertical and horizontal mergers; public utility pricing and regulatory policy.

# **Professional Experience:**

May 2003 – October 2004: Deputy Assistant Attorney General for Economic Analysis, U.S. Department of Justice, Washington, D.C.

March, 1992 – Present: John Michael Stuart Centennial Professor of Economics, University of Texas at Austin.

August, 1991 – March, 1992: Edward Everett Hale Centennial Professor of Economics, University of Texas at Austin.

September, 1983 – August, 1991: Research Manager, Bell Communications Research, Morristown, NJ. Head of Economics Research Group.

September 1981 – September 1983: Member of Technical Staff, Bell Laboratories, Murray Hill, NJ.

September 1980 – September 1981: Adviser to the Chairman of the Civil Aeronautics Board.

January 1980 - September 1980: Consultant, Civil Aeronautics Board, Washington, D.C.

September 1978 – January 1980: Senior Staff Economist, Council of Economic Advisers, Executive Office of the President, Washington, D.C.

October 1973 – September 1978: Member of Technical Staff, Bell Laboratories, Holmdel, NJ.

# **Teaching:**

September 1991 – Present: Introductory Microeconomics, undergraduate and graduate Industrial Organization.

Fall 1989: Visiting Lecturer, Woodrow Wilson School of Public and International Affairs, Princeton University. Graduate course in regulation and public choice.

September 1983 – December 1983: Adjunct Lecturer in Economics, University of Pennsylvania. Graduate course on regulation.

# **Publications:**

### A. Journal Articles:

"A Note on the Concavity of the Mean-Variance Problem," *Review of Economic Studies*, July 1975.

"Permanent and Transitory Income Effects in a Model of Optimal Consumption with Wage Income Uncertainty," *Journal of Economic Theory*, August 1975.

"Optimal Foreign Borrowing with Export Revenue Uncertainty," (with J. L. McCabe), *International Economic Review*, October 1976.

"The Demand for Labor in a Dynamic Model of the Firm," *Journal of Economic Theory*, October 1977.

"Optimal Decisions with Estimation Risk," (with L. C. Rafsky, R. W. Klein and R. D. Willig), *Econometrica*, November 1977.

"Regulatory Commission Behavior: Myopic vs. Forward-Looking," (with E. E. Bailey), *Economic Inquiry*, June 1978.

"Public Utility Pricing Under Risk: The Case of Self-Rationing," (with J. C. Panzar), *American Economic Review*, December 1978. To be reprinted in *The International Library of Critical Writings in Economics*, Mark Blaug (ed.), Edward Elgar Press.

"A Dynamic Model of the Firm with Stochastic Regulatory Review," (with V. S. Bawa), *International Economic Review*, October 1980.

- "Optimal Nonlinear Pricing for Multiproduct Monopolies," (with L. J. Mirman), *Bell Journal of Economics*, Autumn 1980. To be reprinted in *The International Library of Critical Writings in Economics*, Mark Blaug (ed.), Edward Elgar Press.
- "Efficiency and Competition in the Airline Industry," (with D. R. Graham and D. P. Kaplan), *Bell Journal of Economics*, Spring 1983.
- "Optimal Non-Uniform Pricing," (with M. B. Goldman and H. E. Leland), *Review of Economic Studies*, April 1984. To be reprinted in *The International Library of Critical Writings in Economics*, Mark Blaug (ed.), Edward Elgar Press.
- "Reply to Lipman and Further Results," International Economic Review, June 1985.
- "Public Utility Pricing Under Risk: A Generalization," Economics Letters, June 1985.
- "Optimal Consumption, the Interest Rate and Wage Uncertainty," (with D. Levhari), *Economics Letters*, 1986.
- "Regulating Without Cost Information: The Incremental Surplus Subsidy Scheme," (with D. M. Sappington), *International Economic Review*, May 1989.
- "Asymmetric Information, Incentives and Price Cap Regulation," *Rand Journal of Economics*, Fall 1989.
- "Optimal Two Part Tariffs for Inputs," (with J. C. Panzar), *Journal of Public Economics*, November 1989.
- "Regulating Without Cost Information: Some Further Thoughts," (with D. M. Sappington), *International Economic Review*, November 1990.
- "Compensation and Transfer Pricing in a Principal-Agent Model," (with D. E. Besanko), *International Economic Review*, February 1991.
- "Thoughts on Nonlinear Pricing Under Price Cap Regulation," (with D. M. Sappington), *Rand Journal of Economics*, Spring 1992.
- "Ex Ante vs. Post Pricing: Optional Calling Plans vs. Tapered Tariffs," (with K. Clay and P. Srinagesh), Journal of Regulatory Economics, 1992.
- "Optimal Non-linear Pricing With Regulatory Preference over Customer Types," (with W. W. Sharkey), *Journal of Public Economics*, February 1993.
- "Regulatory Incentive Policies and Abuse," (with D. M. Sappington), *Journal of Regulatory Economics*, June 1993.

- "A Bertrand Model of Pricing and Entry," (with W. W. Sharkey), *Economics Letters*, 1993.
- "Optional Two-Part Tariffs: Toward More Effective Price Discounting," (with R. Rudkin) in *Public Utilities Fortnightly*, July 1, 1997.
- "Multiproduct Nonlinear Prices with Multiple Taste Characteristics," (with P. Srinagesh), *Rand Journal of Economics*, Winter 1997.
- "The Competitive Incentives of Vertically-Integrated Local Exchange Carriers: An Economic and Policy Analysis," (with D. L. Weisman), *Journal of Policy Analysis and Management*, Winter 1998.
- "Having Your Cake How to Preserve Universal-Service Cross Subsidies While Facilitating Competitive Entry," (with M. J. Doane and M. A. Williams), *Yale Journal on Regulation*, Summer 1999.
- "Raising Rivals' Costs: The Entry of a Upstream Monopolist into Downstream Markets," (with D. L. Weisman), *Information, Economics and Policy* 10:451-470
- "Selected Economic Analysis at the Antitrust Division: The Year in Review," (with K. Heyer), *Review of Industrial Organizations* 23: 95-119, 2003
- "Pricing Access to a Monopoly Input," (with M. J. Doane, M. A. Williams, and S. Tsai), *Journal of Public Economic Theory*, Vol. 6., No. 4, 2004.
- "An Antitrust Analysis of Bundled Loyalty Discounts," (with P. Greenlee and D. Reitman, *International Journal of Industrial Organization*, Vol. 26, No. 5, 2008.

# B. Reports and Articles in Conference Volumes, and Other Publications

- "The Dynamics of Price Adjustment in Regulated Industries," (with E. E. Bailey), in *Proceedings of IEEE Conference on Systems Control*, 1974.
- "Optimal Non-Uniform Pricing for Electricity: Some Illustrative Examples," (with R. W. Koenker), in Sichel (ed.) *Public Utility Ratemaking in an Energy-Conscious Environment*, Praeger, 1979.
- "Antitrust Policy in the Airline Industry," (with S. B. Jollie), Civil Aeronautics Board, October 1982. Transmitted by the CAB to Congress as part of proposed sunset legislation.
- "Deregulation and the Economic Theory of Regulation," (with W. W. Sharkey), in *Proceedings of the Eleventh Annual Telecommunications Policy Research Conference*, 1983.

"An Analysis of Tapered Access Charges for End Users," (with W. E. Taylor, D. P. Heyman and J. M. Lazorchak), published in *the Proceedings of the Eighteenth Annual Williamsburg Conference on Regulation*, H. Treeing (ed.), Michigan State, 1987.

Report to the Governor, The Task Force on Market-Based Pricing of Electricity. Coauthored with D. M. Sappington, Appendix III.

"Optional Tariffs for Access in the FCC's Price Cap Proposal," (with D. P. Heyman and W. E. Taylor), in M. Einhorn (ed.), *Price Caps and Incentive Regulation in the Telecommunications Industry*, Kluwer, 1990.

"U.S. v. Microsoft: Were the Exclusionary Practices Anticompetitive" (with Michael J. Doane), Computer Industry Newsletter, American Bar Association, Spring 2000, Vol. 5., No. 1.

"Exclusionary Restrictions in U.S. vs. Microsoft," (with M.J. Doane and A. Nayyar), *UWLA Law Review*, 2001.

"U.S. v. Microsoft: Is the Proposed Settlement in the Public Interest?" (with Michael J. Doane), *Computer Industry Newsletter*, American Bar Association, Spring 2002, Vol. 7., No. 1.

"Raising Rivals' Costs: An Analysis of Barnes and Noble's Proposed Acquisition of Ingram Book Company," 2002, Book Chapter in *Measuring Market Power*, Edited by Daniel Slottje, North Holland (with Michael J. Doane).

"An Antitrust Analysis of Bundled Loyalty Discounts," (with P. Greenlee and D. Reitman), Economic Analysis Group Discussion Paper No. 04-13, October 2004.

Currently editing a special issue of the *Antitrust Bulletin* on vertical restraints related to pricing.

#### C. Books:

*The Theory of Public Utility Pricing*, (with S. J. Brown), Cambridge University Press, 1986. Second printing 1986. Third printing 1989.

Co-editor of *Telecommunications Demand Analysis*: An Integrated View, North-Holland, 1989.

### **Editorial Duties:**

Associate Editor of the *Journal of Regulatory Economics*.

Guest Editor of "Bundling Rebates: The Quest for an Antitrust Theory," *Antitrust Bulletin* 50(3), Fall 2005.

# **Unpublished Manuscripts:**

"Equilibrium Exit from a Long-Term Contract," (with S.J. Wilkie), July, 2003. Submitted to *International Economic Review*.

"Cost Asymmetries, Mavericks and Coordinated Behavior," July 2004. Submitted to *Economics Letters*.

### **Other Professional Activities:**

Consultant to the Governor of New Jersey's Task Force on Market-Based Pricing of Electricity.

Referee for National Science Foundation and numerous professional journals.

Consulting for Bell operating companies on a variety of pricing and public policy issues.

Memberships: American Economic Association; listed in Who's Who in the East 1990.

# **Prior Reports and Expert Testimony Within Past Four Years:**

UNITED STATES DISTRICT COURT, EASTERN DISTRICT OF TEXAS, TEXARKANA DIVISION

Cody Wheeler, et al. v. Pilgrims Pride, et al.

Declaration (2008).

### UNITED STATES DISTRICT COURT, WESTERN DISTRICT OF TENNESSEE

Suzanne C. Clarke and Conise P. Dillard, et al. v. Baptist Memorial Healthcare Corporation and Methodist Healthcare.

Expert Report (2008) and deposition testimony (2008).

# UNITED STATES DISTRICT COURT, SOUTHERN DISTRICT OF NEW YORK

Marcus Corporation, et al. v. American Express Company and American Express Travel Related Company.

Expert Reports (2007 and 2008) and deposition testimony (2008).

### UNITED STATES DISTRICT COURT, NORTHEN DISTRICT OF CALIFORNIA

Jensen Enterprises vs. Olcastle Precast, Inc. et al.

Expert report and deposition testimony (2008).

# UNITED STATES DISTRICT COURT, WESTERN DISTRICT OF TEXAS

Marissa Maderazo, et al. v. VHS San Antonio Partners, L.P., et al.

Expert Report, expert sur-rebuttal report, and deposition testimony (2008).

# UNITED STATES DISTRICT COURT, NORTHEN DISTRICT OF CALIFORNIA Jensen Enterprises vs. Olcastle Precast, Inc. et al.

Expert report and deposition testimony (2007).

# UNITED STATES DISTRICT COURT, EASTERN DISTRICT OF PENNSYLVANIA

In re: OSB Litigation

Declaration (2007).

# UNITED STATES DISTRICT COURT, SOUTHERN DISTRICT OF TEXAS

Funeral Consumers Alliance, Inc. et al. v. Service Corporation International, et. al Expert report and deposition testimony (2007).

# UNITED STATES DISTRICT COURT, SOUTHERN DISTRICT OF TEXAS

Pioneer Valley Casket Company, et al. v. Service Corporation International, et al Expert report and deposition testimony (2007).

# UNITED STATES DISCTRICT COURT, EASTERN DISTRICT OF NORTH CAROLINA WESTERN DIVISION

Georgia Pacific v. Von Drehle Corporation

Expert report and deposition testimony (2007).

# UNITED STATES DISTRICT COURT, EASTERN DISTRICT OF TEXAS, TEXARKANA DIVISION

Cody Wheeler, et al. v. Pilgrims Pride, et al.

Surrebuttal declaration (2007).

# UNITED STATES DISTRICT COURT, SOUTHERN DISTRICT OF TEXAS

Funeral Consumers Alliance, Inc. et al. v. Service Corporation International, et. al Expert report, deposition, and hearing testimony (2006).

# UNITED STATES DISTRICT COURT, SOUTHERN DISTRICT OF TEXAS

Pioneer Valley Casket Company, et al. v. Service Corporation International, et al Expert report, deposition, and hearing testimony (2006).

# UNITED STATES DISTRICT COURT, EASTERN DISTRICT OF TEXAS

Tessera, Inc. v. Micron Technology, Inc., Micron Semiconductor Products, Inc., Infineon Technologies AG, Infineon Technologies Richman, LP, Infineon Technologies North America Corp., and Qimonda AG

Expert report and deposition testimony (2006).

### UNITED STATES DISTRICT COURT FOR THE DISTRICT OF NEW JERSEY

Ortho Biotech Products L.P. v. Amgen, Inc. and Amgen USA Inc.

Expert report, deposition, and trial testimony (2006).

# UNITED STATES DISTRICT COURT, SOUTHERN DISTRICT OF TEXAS

Dealer Computer Services, Inc., f/k/a Ford Dealer Computer Services, Inc. vs. Ford Motor Company, Case No. H-06-175

Deposition and trial testimony (2006).

### ILLINOIS COMMERCE COMMISSION

Docket No. 05-0159.

Prepared direct testimony and cross examination (2005).

### U.S. FEDERAL ENERGY REGULATORY COMMISSION

Policy for Selective Discounting, Docket Nos. RM05-02-000 and RM 97-7-000 Affidavit (with Michael J. Doane) (2005).

# UNITED STATES DISTRICT COURT, NORTHERN DISTRICT OF CALIFORNIA

Financial & Security Products Association v. Diebold, Incorporated Expert report and deposition testimony (2005).

# UNITED STATES DISTRICT COURT, WESTERN DISTRICT OF TEXAS

Kinetic Concepts, Inc., KCI Licensing, Inc., KCI USA, Inc., and Wake Forest University Health Sciences v. BlueSky Medical Corporation, Medela AG, Medela, Inc., and Patient Care Systems, Inc.

Expert report and deposition testimony (2005).

### NEVADA GAMING COMMISSION AND STATE GAMING CONTROL BOARD

Harrah's Entertainment, Inc.'s proposed merger with Caesars Entertainment, Inc. Expert report (with Michael J. Doane and Michael A. Williams) (2005).

# NEVADA GAMING COMMISSION AND STATE GAMING CONTROL BOARD

MGM Mirage's proposed merger with Mandalay Resort Group

Expert report (with Michael J. Doane and Michael A. Williams) (2004-2005).

APPENDIX TWO

DOCUMENTS CONSIDERED

### **COURT DOCUMENTS**

Complaint, ZF Meritor LLC and Meritor Transmission Corporation v. Eaton Corporation, Civil Action No. 06-623-SLR (October 5, 2006).

Report of David W. DeRamus, *ZF Meritor LLC and Meritor Transmission Corporation v. Eaton Corporation*, Civil Action No. 06-623-SLR (February 17, 2009), and supporting documentation.

Defendant Eaton Corporation's Motion to Dismiss Plaintiff's Complaint *ZF Meritor LLC and Meritor Transmission Corporation v. Eaton Corporation*, Civil Action No. 06-623-SLR (November 22, 2006), and exhibits.

Plaintiffs ZF Meritor LLC and Meritor Transmission Corporation's Answering Brief in Opposition To Defendant's Motion to Dismiss, *ZF Meritor LLC and Meritor Transmission Corporation v. Eaton Corporation*, Civil Action No. 06-623-SLR (December 11, 2006).

Eaton Corporation's Motion for Reargument, *ZF Meritor LLC and Meritor Transmission Corporation v. Eaton Corporation*, Civil Action No. 06-623-SLR (June 29, 2007).

Plaintiffs ZF Meritor LLC and Meritor Transmission Corporation's Opposition to Defendant's Motion for Reargument, *ZF Meritor LLC and Meritor Transmission Company v. Eaton Corporation*, Civil Action No. 06-623-SLR (July 11, 2007).

Defendant Eaton Corporation's Answer to Plaintiff's Complaint, *ZF Meritor LLC and Meritor Transmission Corporation v. Eaton Corporation*, Civil Action No. 06-623-SLR (February 28, 2008).

Deposition Transcript of Charles Allen (September 17, 2008).

Deposition Transcript of Charles Allen (February 4, 2009).

Deposition Transcript of Paul Barkus (October 28, 2008), and exhibits.

Deposition Transcript of Donald Blanche (February 3, 2009).

Deposition Transcript of Christian Benner (December 5, 2008), and exhibits.

Deposition Transcript of John Buck (January 6, 2009), and exhibits.

Deposition Transcript of Edward Carroll (November 14, 2008).

Deposition Transcript of Kurt Burmeister (October 30, 2008).

Deposition Transcript of Michael Colaccino (December 17, 2008), and exhibits.

Deposition Transcript of Kenneth Davis (October 23, 2008), and exhibits.

Deposition Transcript of Richard Decaire (September 30, 2008), and exhibits.

Deposition Transcript of Dale Delmege (January 4, 2009).

Deposition Transcript of Michael Elwell (October 29, 2008), and exhibits.

Deposition Transcript of Thomas Floyd (October 20, 2008).

Deposition Transcript of William Fouchs (December 11, 2008), and exhibits.

Deposition Transcript of Thomas A. Gosnell (January 16, 2009).

Deposition Transcript of Thomas Grimm (January 9, 2009), and exhibits.

Deposition Transcript of Lee Daniel Hafer (November 6, 2008).

Deposition Transcript of Robert S. Harrison (September 24, 2008).

Deposition Transcript of Michael Hayes (October 30, 2008).

Deposition Transcript of John Hinesly (October 10, 2008), and exhibits.

Deposition Transcript of Ricardo R. Hoffman (November 19, 2008).

Deposition Transcript of John J. Hyatt (December 19, 2008), and exhibits.

Deposition Transcript of Christopher Jablonski (January 1, 2009).

Deposition Transcript of Dennis Allen Kline (December 16th, 2008), and exhibits.

Deposition Transcript of Mark Kollasch (November 24, 2008), and exhibits.

Deposition Transcript of Christopher Konkel (November 21, 2008), and exhibits.

Deposition Transcript of Mark Lampert (December 10, 2008).

Deposition Transcript of Antonio Lopes (January 12, 2009).

Deposition Transcript of David Louya (January 13, 2009).

Deposition Transcript of Thomas Lundahl (October 21, 2008), and exhibits.

Deposition Transcript of Richard Martello (January 9, 2009), and exhibits.

Deposition Transcript of Steven McKeeby (October 22, 2008), and exhibits.

Deposition Transcript of Bruce McLendon (September 26, 2008), and exhibits.

Deposition Transcript of David Naegele (September 17, 2008), and exhibits.

Deposition Transcript of Giap "George" Nguyen (January 28, 2009), and exhibits.

Deposition Transcript of James Pohl (November 26, 2008), and exhibits.

Deposition Transcript of Denise Reeves (November 11, 2008).

Deposition Transcript of David Renz (January 13, 2009).

Deposition Transcript of Michael Ruple (December 9, 2008), and exhibits.

Deposition Transcript of James Sahli (December 3, 2008), and exhibits.

Deposition Transcript of Kenneth Samples (October 28, 2008), and exhibits.

Deposition Transcript of Gregory Sharp (December 11, 2008), and exhibits.

Deposition Transcript of William L. Showen (September 23, 2008).

Deposition Transcript of Dwight Dennis Simpson (October 7, 2008), and exhibits.

Deposition Transcript of John Spanke (October 14, 2008), and exhibits.

Deposition Transcript of Matthew Sturdy (December 9, 2008).

Deposition Transcript of James Sweetnam (January 16, 2009), and exhibits.

Deposition Transcript of Adriana Swartzendruber (November 5, 2008), and exhibits.

Deposition Transcript of Kurt Wells Swisher (November 4, 2008), and exhibits.

Deposition Transcript of Terry L. Tosie (December 23, 2008).

Deposition Transcript of Elizabeth Woodhull (October 3, 2008), and exhibits.

Exhibit 5 to the Deposition of Kenneth Santschi (December 12, 2008).

### **ACADEMIC ARTICLES**

Green, William, (1993), ECONOMETRIC ANALYSIS, 2<sup>nd</sup> Edition, MacMillian Publishing.

Greenlee, Patrick, D. Reitman, and D. Sibley, "An Antitrust Analysis of Bundled Loyalty Discounts," *International Journal of Industrial Organization*, Vol. 26, No. 5, 2008.

### **ELECTRONIC DOCUMENTS**

Build.mdb Class 8 Penetration data 1992-2008.xls Class 8 Penetration data 1992-2006.xls Cognos Data.xls EATON-00254694.xls

Eaton CE data\_all.xls

Eaton Q P&L.xls

FY1996 Unit Sales.xls

FY1997 Unit Sales.xls

FY1998 Unit Sales.xls

FY1999 Unit Sales.xls

FY2000 Unit Sales.xls

FY2001 Unit Sales.xls

FY2002 Unit Sales.xls

FY2003 Unit Sales.xls

FY2004 Unit Sales.xls

FY2005 Unit Sales.xls

FY2006 Unit Sales (Jul thru Sept).xls

FY2006 Unit Sales (thru Jun).xls

FY2007 Unit Sales (full yr).xls

FY 2008 Mexico Pen Rept YEAR END 11-12-08.xls

FY 2008 US and Canada Pen Rept YEAR END (rev) 13th of Nov .xls

Mack transmission quantity.xls

Nov 2008 fy09 NAFTA Pen Rept.xls

Quantity Data.xls

Sales (Dollars) Data.xls

Sep FY06 NAFTA Prod Pen Rept.xls

Sep FY07 NAFTA Truck & Trailer Penetrations.xls

### COMPANY AND INDUSTRY WEB PAGES

http://finance.yahoo.com

http://findarticles.com

http://fleetowner.com

http://refrigeratedtrans.com

http://trailer-bodybuilders.com

http://www.allisontransmission.com

http://www.arvinmeritor.com

http://www.automotive.com

http://www.automotive-fleet.com

http://www.constructionequipment.com

http://www.daf.com

http://www.daimler.com

http://www.dina.com.mx

http://www.eaton.com

http://www.etrucker.com

http://www.fleet-central.com

http://www.freightlinertrucks.com

http://www.hino-global.com

http://www.kenworth.com

```
http://www.macktrucks.com
```

http://www.man.eu

http://www.navistar.com

http://www.paccar.com

http://www.peterbilt.com

http://www.proquest.com

http://www.renault-trucks.com

http://www.roadstar.online.com

http://www.volkswagenag.com

http://www.volvo.com

# **COMPANY DOCUMENTS**

### A. Arvin Meritor

Charles Allen, "Issues and Trends" (2001)

#### B. Eaton

"Eaton's Major Technological Innovations"

C. International Truck and Engine

<sup>&</sup>quot;Eaton "Original" Proposal Analysis"

<sup>&</sup>quot;Eaton HD Transmission Comparison" (February 14, 2003).

<sup>&</sup>quot;EATON Internal Proposal Study"

<sup>&</sup>quot;Eaton Penetration Matrix" (December 13, 2005).

<sup>&</sup>quot;Eaton Penetration Matrix" (December 7, 2005).

<sup>&</sup>quot;Eaton Penetration Summary" (October 21, 2003).

<sup>&</sup>quot;Eaton Proposed Growth Targets Vs ITE '06 Actual YTD Performance" (September 26, 2006).

<sup>&</sup>quot;Eaton/International Agreement Expectations" (October 4, 2005).

<sup>&</sup>quot;EATON/International CSA Open Issues" (November 9, 2005, updated November 22, 2005).

<sup>&</sup>quot;Heavy Duty Automated Transmission Activity" (June 4, 2003).

<sup>&</sup>quot;International / 2002 Penetration" (March 11, 2002).

"International / Eaton 2004 Penetration Analysis – FINAL"

"International / Eaton 2004 Penetration Analysis – OCTOBER (FISCAL YEAR FINAL)"

"International / Eaton 2004 Penetration Analysis"

"International / Eaton 2006 Penetration Analysis – FISCAL YEAR FINAL"

"International Truck & Engine Counter Proposal" (November 1, 2005).

"Manual Transmissions: Summary Recommendations"

"Penetration Tracking Options"

"Price Book Date" (October 1, 2002).

"Supply Manager Questions: Supplier – Eaton Corporation, Supply Manager – TBD/Barkus, Completed By – Barkus"

"Transmission Stategy" (April 10, 2007).

"Transmission Strategy / Allison /Eaton LTA(s)" (February 1, 2006).

"Two In a Box Activity: Powertrain, Steering & Suspension"

Email from Etienne Van Niekerk to Debbie J. Shust, Nicholas P. Matich, "RE: Exclude Maintenance Customer portion" (October 1, 2004).

Email from Jordan H. Feiger to John F. Ringlein, and Jordan H. Feiger, "Re: Meritor Transmission List Price Increase" (September 27, 2002).

Email from Karen S. Kohrman to Karen S. Kohrman, Debbie J. Shust, Douglas B. Taylor, John Wadden, and Ken Bultemeir Jr., "RE: FreedomLine" (March 20, 2006).

Email from Ken Bultemeir Jr. to Debbie J. Shust, "RE: Eaton negotiations" (November 2, 2005).

Email from Mark L. Belisle to Debbie J. Shust, Robert F. Walsh, and Tom Abbott, "RE: ZF and ArvinMeritor Update on Eaton Claim" (March 21, 2005).

Email from Paul D. Barkus to Etienne Van Niekerk, Debbie J. Shust, Gaylynn Skelnik, and Robert F. Walsh, "FW: Update Letter Regarding Future FreedomLine Availability" (March 21, 2005).

Email from Paul D. Barkus to Etienne Van Niekerk, Mark Meegan, Mike Elwell, Gaylynn Skelnik, and Curtis Baylor, "FreedomLine Price Protection" (February 5, 2004).

Email from Paul D. Barkus to John F. Fay, "RE: UltraShift in 9900" (January 30, 2006).

Email from Paul D. Barkus to Ken Bultemeir Jr., RE: UltraShift in 9900" (January 26, 2006).

Email from Paul D. Barkus to Steven McKeeby, "Supply Agreement Penetration Commitments" (December 12, 2005).

Email from Paul D. Barkus to Steven McKeeby and Christ Konkel, "FW: Eaton/International Agreement" (January 19, 2006).

Email from Scott A. Brady to Paul D. Barkus, "RE: Lightning \$98.50 Price Reduction" (July 24, 2003).

Email from Thomas D. Baughmen to Stephan P. Gilligan, Ann B. Hennigan, Ravi Rawat, Debbie J. Shust, and Michael D. House, "FW: Eaton Supply Agreement" (October 24, 2006,).

Letter from Dennis A. Kline and Rolf Lutz to Mark Meegan, "Update – ZFM Joint Venture Dissolution" (February 6, 2004).

Letter from Dennis A. Kline and Rolf Lutz to Tom Akers (March 3, 2005).

Letter from Dennis A. Kline and Rolf Lutz to Tom Akers (March 18, 2005).

Letter from Paul Barkus to Mark Meegan: "Eaton Agreement – Growth Rebate & Phase-Out" (October 29, 2003).

### C. PACCAR

000043 - 000048

000092 - 000118

000122 - 000134

000137 - 000144

000145 - 000149

000168 - 000184

000188 - 000191

000201 - 000204

000214 - 000217

000219 - 000230

000245 - 000284

000295 - 000300

000610 - 000619

000654 - 000680

000777 - 000778

000786 - 000787

000788 - 000826

000840 - 000842

000844 - 000845

000850

001798 - 001799

### **BATES NUMBERED DOCUMENTS**

ARM012524 - 012539

ARM012700 - 012701

ARM012797 - 012807

ARM013110 - 013149

ARM013155 - 013157

ARM013162 - 013167

ARM013187 - 013195

ARM013288

ARM013347

ARM017673 - 017807

ARM017888 - 018031

ARM018090 - 018162

ARMFTL000558 - 000560

ARMFTL002713

ARMFTL002738

ARMFTL006790

ARMFTL006792 - 006793

EAT00101056 - 00101061

EAT00101065 - 00101066

EAT00103263 - 00103264

EAT00103307 - 00103309

EAT00103475 - 00103476

EAT00103561 - 00103562

EAT00103605 - 00103607

EAT00103620 - 00103621

EAT00103766 - 00103767

EAT00122520

EATON-00000422 - 00000423

EATON-00010557 - 00010562

EATON-00013967

EATON-00020408 - 00020409

EATON-00020700 - 00020701

EATON-00020752 - 00020753

EATON-00020762 - 00020860

EATON-00021007

EATON-00021947 - 00021948

EATON-00022283 - 00022287

EATON-00023286 - 00023294

EATON-00023375 - 00023376

EATON-00023414 - 00023416

EATON-00023445 - 00023447

EATON-00023520 - 00023523

EATON-00023633 - 00023635

EATON-00023658 - 00023666

EATON-00023691 - 00023694

EATON-00023771

EATON-00024773 - 00024775

EATON-00024812 - 00024815

EATON-00024849

EATON-00025643

EATON-00026430

EATON-00027110 - 00027113

EATON-00027127 - 00027133

EATON-00028403 - 00028407

EATON-00029198 - 00029203

EATON-00029223 - 00029228

EATON-00029240 - 00029242

EATON-00029306

EATON-00029321

EATON-00029481 - 00029490

EATON-00032732 - 00032735

EATON-00054793 - 00054794

EATON-00058710

EATON-00061829 - 00061830

EATON-00061833 - 00061834

EATON-00061850 - 00061851

EATON-00061863

EATON-00061870 - 00061871

EATON-00061877 - 00061880

EATON-00063216 - 00063217

EATON-00063492

EATON-00067127 - 00067131

EATON-00067142 - 00067143

EATON-00067162

EATON-00076695 - 00076754

EATON-00076769

EATON-00077029 - 00077038

EATON-00077049 - 00077057

EATON-00077223 - 00077224

EATON-00077276 - 00077277

EATON-00077674

EATON-00079521 - 00079523

EATON-00082309 - 00082310

EATON-00082450 - 00082451

EATON-00082798 - 00082801

EATON-00085599 - 00085601

EATON-00086204 - 00086205

EATON-00086313 - 00086315

EATON-00086363

EATON-00086391 - 00086398

- EATON-00086409 00086420
- EATON-00086481 00086489
- EATON-00086684 00086689
- EATON-00087240 00087242
- EATON-00088456 00088509
- EATON-00099012 00099013
- EATON-00107904 00108676
- EATON-00110549 00110556
- EATON-00111933
- EATON-00112405 00112408
- EATON-00113385
- EATON-00113517
- EATON-00113680 00113690
- EATON-00114301 00114302
- EATON-00116945 00116949
- EATON-00116959 00116994
- EATON-00128630 00128672
- EATON-00146665 00146691
- EATON-00146693 00146734
- EATON-00147598 00147599
- EATON-00154057 00154064
- EATON-00155345 00155364
- EATON-00162595 00162608
- EATON-00168706 00168716
- EATON-00185549 00185553
- EATON-00191904 00191907
- EATON-00192590 00192596
- EATON-00202072 00202073
- EATON-00203606 00203613
- EATON-00212775
- EATON-00218104 00218147
- EATON-00218910 00218912
- EATON-00219488 00219489

EATON-00219737 - 00219738

EATON-00280118 - 00280119

EATON-00281597

EATON-00294401 - 00294431

EATON-00326538 - 00326560

EATON-00326633 - 00326652

EATON-00347192 - 00347193

EATON-00348427 - 00348429

EATON-00377730 - 00377742

EATON-00380547 - 00380548

EATON-00380675 - 00380681

EATON-00380683

EATON-00380692

EATON-00380713 - 00380719

EATON-00380741

EATON-00380745 - 00380748

EATON-00380805 - 00380806

EATON-00380870 - 00380871

EATON-00380917 - 00380918

EATON-00380990 - 00380991

EATON-00381020 - 00381022

EATON-00381034 - 00381035

EATON-00381049 - 00381055

EATON-00381075

EATON-00381090 - 00381104

EATON-00381110 - 00381111

EATON-00381127 - 00381128

EATON-00381164 - 00381185

EATON-00381489

EATON-00381808 - 00381851

EATON-00381978 - 00381980

EATON-00382027 - 00382092

EATON-00382154

EATON-00382182

EATON-00384597 - 00384601

EATON-00385193 - 00385195

EATON-00385227 - 00385233

EATON-00385281

EATON-00385569 - 00385604

EATON-00385721 - 00385735

EATON-00386931 - 00386932

EATON-00386960 - 00386961

EATON-00386964 - 00386975

EATON-00386995

EATON-00387107 - 00387109

EATON-00389411 - 00389599

EATON-00438079 - 00438090

EATON-00438105 - 00438122

EATON-00438185

EATON-00450993 - 00450999

EATON-00470585 - 00470587

EATON-00471674 - 00471676

EATON-00478469 - 00478471

EATON-00485886 - 00485889

EATON-00486177 - 00486179

EATON-00555296 - 00555297

EATON-00555430 - 00555431

EATON-00555514 - 00555515

EATON-00560659 - 00560660

EATON-00562190 - 00562193

EATON-00562245 - 00562249

EATON-00564453 - 00564456

EATON-00567020 - 00567045

EATON-00578245

EATON-00581249 - 00581251

EATON-00581483 - 00581484

EATON-00588233 - 00588255

EATON-00618267

EATON-00622275 - 00622276

EATON-00625742

EATON-00628702 - 00628703

EATON-00629276 - 00629280

EATON-00631387

EATON-00631615 - 00631621

EATON-00633685

EATON-00634903

EATON-00639313 - 00639315

EATON-00639493 - 00639496

EATON-00646434

EATON-00655592 - 00655593

EATON-00656162

EATON-00658877 - 00658878

EATON-00666060 - 00666061

EATON-00676703 - 00676731

EATON-00677437

EATON-00679315

EATON-00682033 - 00682039

EATON-00684071 - 00684073

EATON-00685867 - 00685868

EATON-00685916 - 00685917

EATON-00691654 - 00691679

EATON-00692346 - 00692353

EATON-00692986 - 00692914

EATON-00693170

EATON-00699560 - 00699562

EATON-00700928 - 00700930

EATON-00704553 - 00704564

EATON-00704645 - 00704646

EATON-00705545 - 00705557

EATON-00706678

EATON-00707546 - 00707547

EATON-00708101 - 00708102

EATON-00709213 - 00709214

EATON-00710591 - 00710604

EATON-00710988 - 00710994

EATON-00711112 - 00711120

EATON-00713075

EATON-00713085 - 00713086

EATON-00713792 - 00713793

EATON-00714260 - 00714266

EATON-00766698 - 00766712

EATON-00775704 - 00775709

EATON-00912901 - 00912902

EATON-00920894

EATON-00922307

EATON-00930506 - 00930507

EATON-00969271 - 00969272

EATON-00969343 - 00969347

EATON-00969344

EATON-00970671 - 00970674

EATON-00970883 - 00970895

EATON-00971532 - 00971533

EATON-00971538

EATON-00971540

EATON-00971617 - 00971626

EATON-00976414 - 00976422

EATON-00977717 - 00977718

EATON-00986815

EATON-00999730 - 00999733

EATON-00999737 - 00999740

EATON-01000011 - 01000013

EATON-01000393 - 01000420

EATON-01000427 - 01000430

EATON-01000519 - 01000523

EATON-01006219

EATON-01081904 - 01081908

EATON-01082630

EATON-01084489

EATON-01085178 - 01085186

EATON-01110777 - 01110800

EATON-01110863 - 01110946

EATON-01119541 - 01119586

EATON-01119712 - 01120856

EATON-01121655 - 01121678

EATON-01121758 - 01122301

EATON-01122933 - 01122935

EATON-01122945 - 01122956

EATON-01122995

EATON-01123004

EATON-01123785 - 01123808

EATON-01124619 - 01124632

EATON-01124844 - 01124850

EATON-01129837 - 01129841

EATON-01143987 - 01144014

EATON-01158987 - 01158995

EATON-01173231 - 01173233

EATON-01174848 - 01174851

EATON-01179764

EATON-01180865 - 01180867

EATON-01186996 - 01187000

EATON-01187319 - 01187323

EATON-01198518 - 01198560

EATON-01198805 - 01198806

EATON-01202295 - 01202315

EATON-01202350 - 01202351

EATON-01202611 - 01202612

EATON-01202620 - 01202621

EATON-01202757 - 01202758

EATON-01208170

EATON-01208178

EATON-01208180 - 01208181

EATON-01217125

EATON-01217988 - 01217989

EATON-01218762 - 01218764

EATON-01222915 - 01222916

EATON-01222938 - 01222939

EATON-01232951

EATON-01235199 - 01235200

EATON-01235253

EATON-01293039

EATON-01335806

EATON-01352462 - 01352473

EATON-01352534 - 01352550

EATON-01367460 - 01367461

EATON-01367463

EATON-01367560 - 01367561

EATON-01374635 - 01374637

EATON-01375732

EATON-01377600

EATON-01378985

EATON-01381709 - 01381711

EATON-01381717 - 01381719

EATON-01381730 - 01381735

EATON-01385632 - 01385633

EATON-01397488 - 01397490 EATON-01397506 - 01397508

EATON-01400584 - 01400585

EATON-01405413 - 01405414

EATON-01405417

EATON-01405703 - 01405704

EATON-01408524 - 01408526

EATON-01409343 - 01409345

EATON-01409500 - 01409503

EATON-01410862 - 01410863

EATON-01410873 - 01410874

EATON-01410988

EATON-01411065

EATON-01419441 - 01419445

EATON-01423035 - 01423036

EATON-01427423 - 01427424

EATON-01441419 - 01441434

ETNFTL006866 - 006868

ETNFTL011894 - 011896

ETNFTL011901 - 011902

ETNFTL011905 - 011906

ETNFTL012150 - 012152

ETNFTL012174 - 012175

ETNFTL012190 - 012191

ETNFTL013086 - 013087

ETNFTL047469 - 047470

FLINER00149911

FLINER00160898

FLINER00165548 - 00165549

FLINER00167907 - 00167908

FTL0077 - 0097

FTL0124

FTL0174 - 0176

FTL0222 - 0254

FTL0273 - 0278

FTL0340 - 0342

FTL0355 - 0360

FTL0364

FTL0366

FTL0425

FTL0427

FTL0430

FTL0433 - 0434

FTL-FB0001

FTL-FB0027 - 0034

FTL-FB0041

FTL-FB0069 - 0071

FTL-FB0147 - 0173

ITE-000020 - 000023

ITE-000028 - 000033

ITE-000042 - 000044

ITE-000051

ITE-000053

ITE-000056

ITE-000058

ITE-000060 - 000063

ITE-000073

ITE-000076 - 000077

ITE-000083 - 000093

ITE-000096

ITE-000098 - 000104

ITE-000106 - 000136

ITE-000138 - 000140

ITE-000287 - 000288

ITE-000296 - 000299

ITE-000302 - 000306

ITE-000349 - 000350

ITE-000401 - 000404

ITE-000647

ITE-001129 - 001131

- ITE-001147
- ITE-001266 001290
- ITE-001337 001338
- ITE-001350 001366
- ITE-001421 001424
- ITE-001465 001468
- ITE-001584 001596
- ITE-001672 001677
- ITE-001698 001707
- ITE-001743 001745
- ITE-002157
- ITE-002190
- ITE-002207 002212
- ITE-002219 002220
- ITE-002300 002301
- ITE-003837 003838
- ITE-003875 003877
- ITE-003911 003913
- ITE-003967
- ITE-004104 004108
- VM 000084 000119
- VM 000147 000161
- VM 000201 000202
- VM 000224 000250
- VM 002238 009852
- VM2\_00002236 00002238
- VM2\_00002292
- VM2\_00021798
- VM2 00022122 00022126
- VM2\_00022236 00022237
- VM2\_00022328 00022329
- VM2\_00022333 00022335
- VM2\_00024175 00024178

- VM2\_00024316 00024317
- VM2\_00024354
- VM2\_00024392
- VM2\_00024404 00024405
- VM2\_00002523
- VM2\_00028519 00028523
- VM2\_00029342
- VM2\_00029388 00029391
- VM2 00029523
- VM2\_00035700 00035702
- VM2\_00035816 00035822
- VM2\_00070758 00070763
- ZFMA0000003 0000004
- ZFMA0000095 0000103
- ZFMA0000230 0000261
- ZFMA0000340 0000355
- ZFMA0000436 0000439
- ZFMA0000444 0000452
- ZFMA0000623 0000625
- ZFMA0000703 0000765
- ZFMA0000773 0000784
- ZFMA0000794 0000812
- ZFMA0000846 0000861
- ZFMA0000869 0000877
- ZFMA0001003 0001004
- ZFMA0001444 0001463
- ZFMA0001953 0001954
- ZFMA0002359 0002363
- ZFMA0002913 0002914
- ZFMA0003023 0003024
- ZFMA0003185 0003204
- ZFMA0003238 0003239
- ZFMA0003248

- ZFMA0003877 0003881
- ZFMA0003928 0003929
- ZFMA0004714 0004715
- ZFMA0005072 0005083
- ZFMA0006653 0006702
- ZFMA0006993 0007001
- ZFMA0009332 0009333
- ZFMA0009530 0009569
- ZFMA0014533 0014543
- ZFMA0014891 0014914
- ZFMA0015151 0015152
- ZFMA0016037 0016043
- ZFMA0016110 0016112
- ZFMA0016409 0016410
- ZFMA0016775 0016843
- ZFMA0018903 0018904
- ZFMA0019956 0020003
- ZFMA0020533 0020535
- ZFMA0020944 0020968
- ZFMA0021579 0021628
- ZFMA0022509 0022556
- ZFMA0026875 0026877
- ZFMA0027714 0027715
- ZFMA0029669 0029686
- ZFMA0033226 0033235
- ZFMA0034144 0034151
- ZFMA0034361 0034375
- ZFMA0036332
- ZFMA0038858 0038875
- ZFMA0040451 0040454
- ZFMA0040458 0040462
- ZFMA0053726 0053727
- ZFMA0053991 0053992

- ZFMA0054510 0054511
- ZFMA0054514 0054515
- ZFMA0067215 0067264
- ZFMA0067317 0067323
- ZFMA0067331 0067415
- ZFMA0068420 0068442
- ZFMA0069298 0069389
- ZFMA0074508 0074514
- ZFMA0082721 0082727
- ZFMA0085487 0085489
- ZFMA0087280
- ZFMA0087538
- ZFMA0087961 0087964
- ZFMA0089492 0089494
- ZFMA0089793 0089794
- ZFMA0089983 0089987
- ZFMA0090037
- ZFMA0090075 0090077
- ZFMA0090105 0090106
- ZFMA0090955 0090957
- ZFMA0091438 0091441
- ZFMA0091505 0091508
- ZFMA0091615 0091616
- ZFMA0091779 0091780
- ZFMA0093295
- ZFMA0094217 0094218
- ZFMA0094552 0094555
- ZFMA0095312 0095315
- ZFMA0095931 0095932
- ZFMA0096022 0096034
- ZFMA0096060
- ZFMA0096203 0096205
- ZFMA0097464 0097466

- ZFMA0097809 0097810
- ZFMA0098486 0098488
- ZFMA0098527 0098532
- ZFMA0098533 0098536
- ZFMA0098863 0098864
- ZFMA0098867 0098868
- ZFMA0098874 0098877
- ZFMA0099098 0099101
- ZFMA0099796 0099801
- ZFMA0099890 0099905
- ZFMA0110526 0110533
- ZFMA0112480 0112484
- ZFMA0112681 0112682
- ZFMA0112687
- ZFMA0112837 0112838
- ZFMA0123680 0123681
- ZFMA0129721 0129722
- ZFMA0130582 0130594
- ZFMA0131049 0131053
- ZFMA0134260 0134261
- ZFMA0134324 0134327
- ZFMA0134329
- ZFMA0134333 0134336
- ZFMA0134341 0134344
- ZFMA0134422 0134328
- ZFMA0134489
- ZFMA0135009 0135010
- ZFMA0135087 0135088
- ZFMA0135350 0135363
- ZFMA0135541 0135554
- ZFMA0135915 0135916
- ZFMA0136114 0136128
- ZFMA0138190 0138217

- ZFMA0138448 0138449
- ZFMA0139754 0139777
- ZFMA0140339 0140380
- ZFMA0140670 0140688
- ZFMA0141253 0141272
- ZFMA0141290 0141309
- ZFMA0141440 0141454
- ZFMA0141504 0141517
- ZFMA0141528 0141538
- ZFMA0141601 0141614
- ZFMA0141710 0141746
- ZFMA0142432 0142434
- ZFMA0142439 0142441
- ZFMA0142618
- ZFMA0142944
- ZFMA0151836 0151837
- ZFMA0152533 0152534
- ZFMA0153115 0153122
- ZFMA0153482 0153616
- ZFMA0158650 0158651
- ZFMA0158740 0158743
- ZFMA0162769 0162774
- ZFMA0164286 0164289
- ZFMA0164328 0164329
- ZFMA0165900 0165902
- ZFMA0166855 0166856
- ZFMA0170083 0170084
- ZFMA0174022 0174024
- ZFMA0174508
- ZFMA0179030 0179031
- ZFMA0181469 0181475
- ZFMA0183093 0183094
- ZFMA0183148 0183151

- ZFMA0184502 0184539
- ZFMA0185257 0185258
- ZFMA0185369
- ZFMA0185923 0185928
- ZFMA0186297 0186310
- ZFMA0186327 0186328
- ZFMA0187126 0187127
- ZFMA0196261 0196285
- ZFMA0196697 0196705
- ZFMA0197466 0197493
- ZFMA0198238 0198260
- ZFMA0199602 0199604
- ZFMA0200057 0200060
- ZFMA0200112 0200116
- ZFMA0200151 0200154
- ZFMA0200172 0200180
- ZFMA0200352 0200353
- ZFMA0200447 0200448
- ZFMA0200511 0200513
- ZFMA0200524 0200526
- ZFMA0200844 0200846
- ZFMA0202522
- ZFMA0208547 0208549
- ZFMA0211786
- ZFMA0212250
- ZFMA0213049 0213053
- ZFMA0214679 0214687
- ZFMA0215211 0215215
- ZFMA0215254 0215256
- ZFMA0215267 0215271
- ZFMA0215354 0215356
- ZFMA0215606 0215612
- ZFMA0216488 0216496

- ZFMA0217523 0217525
- ZFMA0217574 0217581
- ZFMA0218918 0218921
- ZFMA0219001 0219003
- ZFMA0219125 0219129
- ZFMA0219687 0219690
- ZFMA0220129
- ZFMA0221355 0221356
- ZFMA0222161 0222164
- ZFMA0222175 0222179
- ZFMA0224480 0224482
- ZFMA0224492 0224498
- ZFMA0228273 0228281
- ZFMA0228851 0228857
- ZFMA0229026 0229027
- ZFMA0229075 0229080
- ZFMA0229970
- ZFMA0232015
- ZFMA0232176 0232177
- ZFMA0233588
- ZFMA0234246 0234247
- ZFMA0234273 0234276
- ZFMA0236104 0236106
- ZFMA0236721 0236726
- ZFMA0236835 0236836
- ZFMA0236842 0236843
- ZFMA0236864
- ZFMA0236986 0236989
- ZFMA0237447 0237449
- ZFMA0237505
- ZFMA0237596 0237601
- ZFMA0237667 0237673
- ZFMA0237897

- ZFMA0238055 0238056
- ZFMA0238095 0238096
- ZFMA0238235 0238237
- ZFMA0240806 0240807
- ZFMA0240872 0240874
- ZFMA0240891 0240902
- ZFMA0241411 0241412
- ZFMA0241419 0241420
- ZFMA0249121 0249128
- ZFMA0252295 0252298
- ZFMA0255772 0255773
- ZFMA0256037 0256038
- ZFMA0257176
- ZFMA0266938 0266940
- ZFMA0271183 0271187
- ZFMA0272694 0272695
- ZFMA0273185
- ZFMA0273256 0273257
- ZFMA0273258 0273267
- ZFMA0273271 0273272
- ZFMA0273583 0273591
- ZFMA0273663 0273664
- ZFMA0285940 0285966
- ZFMA0291024
- ZFMA0292726 0292728
- ZFMA0293315
- ZFMA0295316 0295318
- ZFMA0295361
- ZFMA0295754
- ZFMA0295766
- ZFMA0296200 0296201
- ZFMA0298710 0298721
- ZFMA0299470

ZFMA0303067

ZFMA0303094

ZFMA0303628 - 0303635

ZFMA0311024 - 0311025

ZFMA0311865 - 0311866

ZFMA0312081 - 0312085

ZFMA0315355

ZFMA0316685 - 0316686

ZFMA0317588 - 0317598

ZFMA0321401 - 0321402

ZFMA0321503

ZFMA0329577

ZFMA0333389 - 0333439

ZFMA0336448 - 0336462

ZFMA0340441

ZFMA0340864 - 0340865

ZFMA0343110 - 0343241

ZFMA0343454 - 0343458

ZFMA0343536 - 0343545

ZFMA0343734 - 0343740

ZFMA0345009 - 0345015

ZFMA0345131 - 0345137

ZFMA0345354 - 0345442

ZFMA0345856 - 0345868

ZFMA0348024 - 0348036

ZFMA0348166 - 0348173

ZFMA0348587 - 0348665

ZFMA0348897 - 0348910

ZFMA0348926 - 0348945

ZFMA0348947 - 0348955

ZFMA0349015 - 0349019

ZFMA0349062 - 0349068

ZFMA0349070 - 0349082

ZFMA0355697 - 0355709

ZFMA0356426 - 0356536

ZFMA0358435 - 0358462

ZFMA0364135

ZFMA0364161

ZFMA0366287 - 0366346

ZFMA0368080 - 0368063

ZFMA0368676 - 0368702

ZFMA0368703 - 0368721

ZFMA0369299 - 0369319

ZFMA0369760 - 0369768

ZFMA0371183 - 0371187

ZFMA0371408 - 0371410

ZFMA0371511 - 0371517

ZFMA0373337

ZFMA0373511 - 0373513

ZFMA0373724

ZFMFD0001 - 0024

### EXHIBIT 9

#### UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

ZF Meritor LLC and Meritor Transmission Corporation	)
Plaintiffs	)
V.	.)
Eaton Corporation	)
Defendant	)

Declaration of David W. DeRamus, Ph.D.

in Response to

Defendant's Memorandum of Law in Support of its Motion to Exclude Opinion Testimony of Dr. David W. DeRamus

June 11, 2009

#### 1. Scope of Declaration

(1) My name is David W. DeRamus. My business address is 1300 Eye Street, NW, Suite 600E, Washington, DC, 20005. I have been asked by counsel for ZF Meritor LLC ("ZF Meritor") and Meritor Transmission Corporation ("Meritor," and with ZF Meritor, "ZFM" or "Plaintiffs") to respond to various allegations and arguments raised by Eaton Corporation ("Eaton" or "Defendant") in its May 11, 2009 motion to exclude my testimony in this matter.

#### 2. Summary of Defendant's arguments

- (2) Counsel for Eaton raises the following primary arguments in support of its motion to exclude my testimony in its entirety:
  - I have presented no accepted scientific test with which to establish the exclusionary effect of Eaton's conduct.
  - Because I have not performed an "attribution test," I have no objective means of concluding that Eaton's conduct was anticompetitive.
  - I have not disaggregated damages to account for the effect on ZFM of factors unrelated to Eaton's anticompetitive conduct.
  - My damages analysis is based on an economically unsound assumption that ZFM would have raised prices in a "but for" world absent Eaton's anticompetitive conduct.
  - My damages analysis is based on business projections that I have insufficiently analyzed in order to determine their reliability.
  - My damages analysis is based on the unsupported assumption of a large untapped demand for automated mechanical transmissions that is assertedly contradicted by the facts.
  - My analysis of lost enterprise value is inconsistently applied, "rigged," and contrary to an IRS Revenue Ruling.

#### 3. My report relies on accepted scientific methods of analysis

- (3) While Eaton argues that my analysis should be excluded in its entirety, none of Eaton's criticism is applicable to my well-accepted approach to defining the relevant markets and to establishing that Eaton has monopoly power in the relevant markets. Establishing Eaton's monopoly power is a fundamental "building block" for an economic assessment of whether the conduct at issue is anticompetitive.
- (4) My analysis of harm to competition is consistent with the "rule of reason" approach adopted by economists<sup>1</sup> in assessing allegations of illegal monopolization.
- (5) As discussed in my testimony, there is a voluminous economic literature that discusses the conditions under which conduct such as Eaton's can be anticompetitive. Each of the conditions that economists (and the courts) have often identified as leading to anticompetitive harm is present here. For example:
  - Eaton is a monopolist;<sup>2</sup>
  - Eaton's LTAs are long-term contracts;<sup>3</sup>
  - they cover all of the available distribution channels;<sup>4</sup>
  - their staggered terms restrict the share of the market for which another manufacturer of HD Transmissions can compete, even when the LTAs do expire;<sup>5</sup>

See, e.g., William E. Kovacic and Carl Shapiro, "Antitrust policy: a century of economic and legal thinking," *Journal of Economic Perspectives* 14, (2000): pp. 43-60.

<sup>&</sup>lt;sup>2</sup> See DeRamus Report, Section 6. Also see, for example, Standard Fashion Co. v. Magrane-Houston Co., 258 U.S. 346 (1922), and United Shoe Machinery Corp. v. United States, 258 U.S. 346 (1922) for early Supreme Court decisions, and United States v. Microsoft Corp.,, 253 F.3d 34 (D.C. Cir.), cert. denied, 122 S. Ct. 350 (2001) and Avery Dennison Corp. v. ACCO brands, Inc, 2000-1 Trade Cas. (CCH) ¶ 72,882 (C.D. Cal. 2000), for more recent decisions.

<sup>&</sup>lt;sup>3</sup> Note that, even in cases in which the contracts at issue are of short duration or can be terminated at will, what matters is whether such termination is practically feasible for the buyer. See, for example, the discussion of 3M v. Appleton Papers, 35 F. Supp. 2d 1138 (D. Minn 1999), and United States v. Dentsply, 2001-1 Trade Cas.(CCH) ¶ 73,247 (D. Del. 2001) in Jonathan Jacobson, "Exclusive Dealing, "Foreclosure," and Consumer Harm," 70 Antitrust Law Journal, 311, 327 (2002).

<sup>&</sup>lt;sup>4</sup> See, e.g., *United States v. Dentsply*. Note that Eaton's LTAs cover a greater portion of the market than that covered by Dentsply's conduct (which was about 80%).

<sup>&</sup>lt;sup>5</sup> See, e.g., Michael D. Whinston, Lectures on Antitrust Economics, MIT Press (2008): pp. 147-148, "To succeed in continuing exclusion, an incumbent needs to ensure that the number of free buyers is low at every point in time.

- the LTAs require that the OEMs maintain or increase Eaton's HD Transmission penetration and exclude other producers of HD Transmissions as a condition of receiving certain prices, discounts, rebates, or other payments from Eaton; <sup>6</sup> and
- Eaton structured the LTAs such that if the OEMs failed to achieve Eaton's HD Transmission penetration targets, the OEMs faced significant financial penalties across all of their HD Transmission purchases.<sup>7</sup>
- (6) Contrary to Eaton's assertion, I have provided in my report a number of different, widely accepted "testable hypotheses" extensively discussed in the peer-reviewed economic literature to assess whether Eaton's conduct is anticompetitive, including:
  - erecting insurmountable barriers to entry;8
  - raising rivals' cost;9
  - increasing prices to end customers; 10
  - increasing prices to OEMs in the long-run; 11 and
  - preventing or limiting technological innovation. 12

This will involve the incumbent staggering the expiration dates of his contracts if these are of limited duration."

<sup>&</sup>lt;sup>6</sup> For an economic analysis of the anticompetitive effects of share-based rebates see, for example, A. Majumdar and Shaffer, G. (2009), "Market-Share Contracts with Asymmetric Information," *Journal of Economics & Management Strategy*, Vol. 18, Issue 2 (Summer), pp. 393-421. Examples of cases in which share-based rebates were found to be anticompetitive by the courts include *Avery Dennison Corp. v. ACCO brands, Inc*, 2000-1 Trade Cas. (CCH) ¶ 72,882 (C.D. Cal. 2000) and *LePage's Inc. v. 3M*, 277 F.3d 365 (3d Cir. 2002) (rejecting claim), *rehearing en banc granted, judgment vacated*, Nos. 00-1368, 00-1473 (3d Cir. Feb. 25, 2002).

<sup>&</sup>lt;sup>7</sup> The rebate programs in Eaton's LTAs provide that an OEM would lose its rebates on all the transmissions it purchases from Eaton if it fails to meet the share target. For an analysis of this type of share-based, all-units rebates see, for example Willard K. Tom, David A. Balto & Neil W. Averitt, Anticompetitive Aspects of Market-Share Discounts and Other Incentives to Exclusive Dealing, 67 Antitrust L.J. 615 (2000).

<sup>&</sup>lt;sup>8</sup> See DeRamus Report, Sections 6.3 and 6.5.

<sup>&</sup>lt;sup>9</sup> See DeRamus Report, Section 10.4.

<sup>&</sup>lt;sup>10</sup> See DeRamus Report, Section 10.9.

<sup>11</sup> See DeRamus Report, Section 10.8.

<sup>&</sup>lt;sup>12</sup> See DeRamus Report, Section 10.3.

- (7) The analysis of barriers to entry has a long history in economics. <sup>13</sup> It is also a basic component of the U.S. DOJ/FTC Horizontal Merger Guidelines and has featured prominently in many court decisions involving antitrust issues. For example, in *U.S.* v. *Microsoft*, a central issue was the extent to which Microsoft was able to maintain its monopoly power in the relevant market by preventing threats to the "applications barrier to entry," *e.g.*, by foreclosing Netscape and other threats to its PC operating system monopoly. <sup>14</sup> In my testimony, I not only analyze whether there are preexisting barriers to entry in the relevant markets, but also whether Eaton's conduct at issue has had the effect of creating or reinforcing barriers to entry in the relevant markets. Indeed, I conclude that not only has Eaton's conduct had this effect, but Eaton itself has explicitly recognized the barrier to entry preventing entry by new competitors that Eaton's conduct has created. <sup>15</sup>
- (8) Many of my conclusions are based on a well-established economic theory of competitive harm, known as "raising rival's costs," as discussed in my testimony. 16 As argued by Krattenmaker and Salop and summarized by Jacobson: "the raising rivals' costs approach, or RRC, posits that an exclusionary arrangement (such as exclusive dealing) can raise the market price of a product, and thereby harm consumers, if the exclusive arrangement (1) is imposed by a firm with actual or potential market power, (2) increases the costs of rivals (through foreclosure or otherwise) sufficiently to diminish their capability to constrain the firm's market power, and (3) thereby permits the firm to raise prices to customers in the relevant market." I have thoroughly analyzed the evidence and demonstrated that the three conditions above are satisfied in the case at hand.

See, e.g., Joe S. Bain, Barriers to New Competition. Harvard University Press, 1956; William J. Baumol and Robert D. Willig, "Fixed Costs, Sunk Costs, Entry Barriers, and Sustainability of Monopoly", Quarterly Journal of Economics 96 (1981): pp. 405-431; R. Preston McAfee, Hugo M. Mialon, and Michael A. Williams, "What is a Barrier to Entry?" American Economic Review 94, (2004): pp. 461-465; Barry Nalebuff, "Bundling as an Entry Barrier", Quarterly Journal of Economics 119, (2004): pp. 159-187; Martin Peitz, "Bundling may blockade entry", International Journal of Industrial Organization 26, (2008): pp. 41-58.

<sup>&</sup>lt;sup>14</sup> See, e.g., *U.S. v. Microsoft*, Findings of Fact, ¶¶68, 93, 142, 155, 227, 384, 409, and 411.

<sup>&</sup>lt;sup>15</sup> See DeRamus Report, Section 6.3. The fact that a monopolist's exclusionary conduct can erect barriers to entry has been recognized in several monopolization cases, see e.g. *United States v. Pullman Co.*, 50 F. Supp. 123 (E.D. Pa. 1943) and *United Shoe Machinery Corp. v. United States*, 258 U.S. 451 (1922).

<sup>&</sup>lt;sup>16</sup> DeRamus Report, ¶226.

<sup>&</sup>lt;sup>17</sup> Thomas Krattenmaker and Steven Salop, "Anticompetitive Exclusion: Raising Rivals' Costs to Achieve Power over Price," 96 Yale Law Journal 209 (1986); and Jonathan Jacobson, "Exclusive Dealing, "Foreclosure," and

- (9)The conduct at issue is not simply about Eaton's pricing towards OEMs, but perhaps most importantly it is about the effect of Eaton's conduct on end customers – preventing end customers from getting the products they want, limiting their access to new cost-saving technology, and increasing the net prices they pay. The focus of an analysis of anticompetitive effects of the conduct at issue on end customers has long been of central importance to economists and the courts. In my report, I provide extensive evidence that in addition to foreclosing ZFM, the intent and effect of Eaton's conduct was to reduce the amount of price concessions that Eaton had previously provided to end customers in competing with ZFM. Indeed, one can consider Eaton's conduct as a form of "costless predation", <sup>18</sup> to the extent that Eaton's offer of increased rebates to the OEMs in return for foreclosing ZFM from the market was funded at least in part by Eaton reducing rebates paid to end customers. <sup>19</sup> This economic theory of anticompetitive harm is consistent with a wide body of recent economic literature, particularly in the context of the use of rebates and bundling by "upstream" manufacturers selling to distributors or other "downstream" firms - with the upstream and downstream firms effectively colluding to increase prices to end customers and splitting the resulting economic rents.<sup>20</sup>
- (10) While I consider the primary anticompetitive harm from Eaton's conduct to be suffered by end customers and ZFM, I also note that, in the long-run, Eaton's conduct led to increased prices to OEMs as well, by eliminating Eaton's only competitor and erecting insurmountable barriers to entry. There is perhaps no clearer "standard economic model" in analyzing whether conduct at issue is anticompetitive than an assessment of whether the conduct has or will likely lead to increased prices.
- (11) A monopolist's efforts to deprive customers of the benefits of technological innovation have also been of concern to economists and the courts. In economics, it

Consumer Harm," 70 Antitrust Law Journal, 311, 327 (2002).

<sup>&</sup>lt;sup>18</sup> See, e.g., Barry Nalebuff, "Exclusionary bundling", Antitrust Bulletin 50, (2005): pp. 321-370; Patrick Greenlee, David Reitman, and David S. Sibley, "An antitrust analysis of bundled loyalty discounts", International Journal of Industrial Organization 26, (2008): pp. 1132-1152.

<sup>&</sup>lt;sup>19</sup> See DeRamus Report, Section 10.9.

<sup>&</sup>lt;sup>20</sup> See J.-M. Abito and J. Wright, "Exclusive Dealing with Imperfect Downstream Competition", *International Journal of Industrial Organization*, 2008, 26: 227-246; J. Wright, "Exclusive Dealing and Entry, when Buyers Compete: Comment," *American Economic Review*, forthcoming; J. Simpson and Wickelgren, "Naked Exclusion, Efficient Breach, and Downstream Competition," *American Economic Review*, 2007, 97(4): 1305-20.

<sup>&</sup>lt;sup>21</sup> See DeRamus Report, Section 10.8.

is well understood that anticompetitive exclusionary conduct can reduce the ability of competitors to introduce innovations. <sup>22</sup> The primary purpose of the U.S. DOJ Intellectual Property Guidelines is to address the potential harm to innovation resulting from anticompetitive restrictions on intellectual property. <sup>23</sup> Similarly, in *U.S. v. Microsoft*, a central issue was the extent to which Microsoft's conduct foreclosed new, innovative technologies that had the potential to change computing. <sup>24</sup> In my testimony, I analyze extensively the role of Eaton's conduct in preventing technological innovation (the FreedomLine).

(12) In my report, I also perform an econometric analysis to assess whether there was a "structural break" starting in July 2000, consistent with the hypothesis that Eaton's anticompetitive conduct caused a significant reduction in ZFM's market share. <sup>25</sup> In particular, in order to test for the effect of Eaton's exclusionary conduct on ZFM's market share, I interact a conduct "indicator variable" with all of the other explanatory variables. If Eaton's exclusionary conduct had no anticompetitive effect, I would expect the coefficients on the conduct indicator variable and the interacted terms to be statistically indistinguishable from zero. In fact, all of the estimated coefficients on the interacted terms are statistically different from zero (at the 90% confidence level), and a standard statistical test (the "Wald test") confirms a "structural break" with Eaton's "OEM partnership" period.

### 4. An attribution test is unnecessary in this case due to the scope of conduct at issue

(13) While I consider Eaton to have engaged in significant predation, there are many ways in which a monopolist can engage in predation. While some form of a price-cost or

See, e.g., Kenneth J. Arrow, "Economic welfare and the allocation of resources for invention", in *The rate and direction of inventive activity*, National Bureau of Economic Research conference report. Princeton: Princeton University Press, 1962, pp. 609-625; Jerry Ellig, ed. *Dynamic competition and public policy: technology, innovation, and antitrust issues*, Cambridge University Press, 2001; Carl Shapiro, "Antitrust, Innovation, and Intellectual Property," Testimony before the Antitrust Modernization Commission, 2005.

<sup>&</sup>lt;sup>23</sup> See U.S. DOJ/FTC Antitrust Guidelines for the Licensing of Intellectual Property, available at http://www.usdoj.gov/atr/public/guidelines/0558.htm

<sup>&</sup>lt;sup>24</sup> See U.S. v. Microsoft, Findings of Fact, ¶412.

<sup>&</sup>lt;sup>25</sup> See DeRamus Report, Sections 11.6 and 15.2.

<sup>&</sup>lt;sup>26</sup> See, for example, the discussion of the economic literature in Michael D. Whinston, *Lectures on Antitrust Economics*, MIT Press (2006), Chapter 4, and the court decisions in *United States v. Microsoft Corp.*, 253 F.3d 34

attribution test may be appropriate when bundling and/or rebates are the *only* conduct at issue, the conduct in this case does not simply involve Eaton's offer of rebates or lower prices in return for a certain volume or share of purchases by the OEMs.<sup>27</sup> Rather, Eaton has engaged in a variety of other conduct, including, without limitation:

- agreements to exclude competing transmissions from the databook;<sup>28</sup>
- agreements to increase the price of competing transmissions;<sup>29</sup>
- horizontal price-fixing agreements;<sup>30</sup>
- the imposition of inefficiencies and additional costs on OEMs and end customers resulting from the agreements;<sup>31</sup>
- price increases to end customers (via reduced "SPIFFs" or competitive equalization payments);<sup>32</sup> and
- other direct evidence that the primary purpose of the LTAs was to foreclose ZFM from the market, not to offer OEMs better prices.<sup>33</sup>
- (14) As discussed in my testimony,<sup>34</sup> the conclusions of the economic literature have been refined in a number of recently published articles showing that exclusion of a rival by a monopolist is even more likely when its direct buyers are downstream firms (such as the OEMs in the HD Transmission markets) than when they are end customers. OEMs are more likely to help a monopolist supplier exclude a rival supplier because they can shift the burden of any future price increase resulting from a loss of competition in the upstream market onto end customers. This theory shows that the

<sup>(</sup>D.C. Cir.), cert. denied, 122 S. Ct. 350 (2001) and LePage's Inc. v. 3M, 277 F.3d 365 (3d Cir. 2002) (rejecting claim), rehearing en banc granted, judgment vacated, Nos. 00-1368, 00-1473 (3d Cir. Feb. 25, 2002).

<sup>&</sup>lt;sup>27</sup> See DeRamus Report, Section 8.

<sup>&</sup>lt;sup>28</sup> See DeRamus Report, Section 8.

<sup>&</sup>lt;sup>29</sup> See DeRamus Report, Section 8.

<sup>&</sup>lt;sup>30</sup> See DeRamus Report, Section 8.4.

<sup>31</sup> See DeRamus Report, Section 8.

<sup>&</sup>lt;sup>32</sup> See DeRamus Report, Section 10.9.

<sup>33</sup> See DeRamus Report, Section 8.

<sup>&</sup>lt;sup>34</sup> DeRamus Report, ¶225.

payment for exclusivity can be a means for a monopolist to share with the downstream firms (the OEMs) the monopoly rents created or preserved by excluding the rival. Besides harming the rival, this exclusionary strategy harms end customers, who face higher prices and reduced product variety.<sup>35</sup>

- (15) As shown in an article co-authored by Dr. Sibley, one of Eaton's economic experts, a dominant firm can leverage its absolute monopoly power in a given market (e.g., HD performance transmissions) to marginalize a rival and raise prices in another market (e.g., HD linehaul transmissions) in which the dominant firm faces actual or potential competition. As argued by Dr. Sibley and his co-authors: "A main point of this article is that bundled rebates are not usefully analyzed using predatory pricing case law. Not only do prices typically exceed marginal cost, but anticompetitive effects may not require a short term profit sacrifice or a period of recoupment. Bundled rebates can generate anticompetitive effects, but they do so by confronting consumers with the choice between a collection of tied discount prices and unattractive standalone prices, all above cost." 37
- (16) Noted economist Michael Whinston in his book *Lectures on Antitrust* confirms that there is no basis to Eaton's assertion that an "attribution" test is a *sine qua non* of any scientific, testable theory of competitive harm through exclusionary contracts.<sup>38</sup>

  Chapter 4 of Whinston's book, devoted to "exclusionary vertical contracts", is one of the most recent, complete, and well-regarded texts on the subject. *The attribution test, or any other type of price-cost test, is not mentioned at all in the entire chapter.* This does not mean that a price-cost test is never informative, but it clearly refutes Eaton's assertions that any *bona fide* economic theory of exclusionary contracts requires an attribution test.
- While an attribution test is unnecessary given the facts in this case, there is also no standard attribution test that can be mechanistically applied in all cases. Indeed, in

See J.-M. Abito, and J. Wright, "Exclusive Dealing with Imperfect Downstream Competition", *International Journal of Industrial Organization*, 2008, 26: 227-246; J. Wright, "Exclusive Dealing and Entry, when Buyers Compete: Comment," *American Economic Review*, forthcoming; J. Simpson and Wickelgren, "Naked Exclusion, Efficient Breach, and Downstream Competition," *American Economic Review*, 2007, 97(4): 1305-20.

<sup>&</sup>lt;sup>36</sup> P. Greenlee, D. Reitman, and D.S. Sibley, "An antitrust analysis of bundled loyalty discounts," *International Journal of Industrial Organization* 26, no. 5. (2008):1132—1152.

<sup>&</sup>lt;sup>37</sup> *Id.*, p. 1149.

<sup>38</sup> Michael D. Whinston, Lectures on Antitrust Economics, MIT Press (2006), Chapter 4.

many situations, the results of an attribution test can be highly sensitive to a number of important assumptions for which there is no consensus in either economic theory or practice. An attribution test will depend crucially on the measure of cost used (e.g., variable or total cost), the measure of rebates used (e.g., rebates expected, accrued, or paid), and the share of the monopolist's sales for which the rival can reasonably be expected to compete within a reasonable span of time (given buyers' preferences, potential capacity constraints, and other limitations on buyers' switching behavior). Different assumptions regarding the relevant share of sales on which to apply an attribution test are particularly susceptible to changing the results of such a test, as a monopolist may be able to use a rebate or discount schedule to effectively set prices below cost on its marginal sales for which a competitor is attempting to compete, even though its aggregate sales are priced above cost.

- (18) It is important to note that such below-cost (or even negative) prices at the margin is not simply a hypothetical result, but in this case, they are *necessarily* implied by Eaton's rebate schedule *over some range of sales*. For example, Eaton's LTA with PACCAR stipulates that PACCAR receives no rebate at all if it purchases less than 90% of its heavy duty transmissions from Eaton, while it receives a 2% rebate on *all* of its purchases from Eaton if it meets the 90% share target but remains below a 95% share, and receives a 3% rebate if it meets or exceeds a 95% share.<sup>39</sup> This implies that the Eaton units that would allow PACCAR to move its share of purchases from Eaton from 89% to 90% are effectively sold at a *negative* price.<sup>40</sup>
- (19) The fact that Eaton's rebates to Freightliner resulted in Eaton pricing below cost for an important quantity of sales is confirmed by a 2001 Eaton planning and review document.<sup>41</sup> Eaton reported that its penetration at Freightliner was 76% by the end of the third quarter of 2001 and estimated that, given the expected total demand for Freightliner trucks, Freightliner needed to convert approximately 1,800 units during the next two quarters in order to reach Eaton's 92% share target by the end of the first

<sup>39</sup> See DeRamus Report, ¶162.

To see this, assume that PACCAR only purchased a total of 100 transmissions at a price of *p* dollars from all HD transmission manufacturers (the results are independent of the total number or price of the units of heavy duty transmission purchased by PACCAR). If PACCAR purchased 89 transmissions from Eaton, it would receive no rebate and pay (89 x *p*) dollars. If instead PACCAR purchased 90 transmissions, it would receive a 2% rebate and pay (90 x 0.98 x *p*) = (88.2 x *p*). PACCAR would therefore pay a negative price (i.e., in effect be paid by Eaton) equal to (-0.8 x *p*) dollars for switching the 90<sup>th</sup> unit from ZFM to Eaton.

<sup>41</sup> FTL0147-0158 at 0156.

quarter of 2002. The document states that converting these units from Meritor to Eaton would equate "to a conversion benefit to Freightliner of \$1,388 per unit per quarter of *enhanced* rebate/pricing dollars" (emphasis in the original). In his testimony, Dr. Sibley reports that the average price of Eaton's linehaul transmissions for 2001 and 2002 was \$3,204, and the average variable cost of these transmissions was \$2,504. Eaton's Since the per unit "enhanced rebate" of \$1,388 referenced in Eaton's document implies an effective per unit price of \$1,816 (= \$3,204 – \$1,388) for the 1,800 transmissions that Freightliner needed to convert, these transmissions were sold at an effective price significantly below Dr. Sibley's estimate of average variable cost.

### 5. Disaggregation is unnecessary, and I account for other relevant factors unrelated to Eaton's anticompetitive conduct

- (20) I did not disaggregate damages into each component of Eaton's conduct, since such a disaggregation is unnecessary.<sup>43</sup> This is not a case in which the conduct at issue can be analyzed from an economic perspective as individually separable acts.
- (21) In my report, I analyzed extensively the effect on ZFM's sales and market shares of Eaton's conduct and several other potential explanatory factors, as discussed extensively in Section 8 and 9 of my report (and particularly in Section 9.2). For example, with regard to warranty issues, I examined the empirical evidence regarding the potential impact on ZFM shares of its warranty claims, and I concluded that its "G-platform" warranty claim issues did not coincide with the significant declines in the ZFM market shares. <sup>44</sup> I also concluded that as a significant *cost* issue for ZFM, the warranty claims related to the G-platform were largely resolved by 2002, as indicated by the ZFM data. <sup>45</sup> In addition, I examined prior episodes in which ZFM

Table 3 of Dr. Sibley's testimony reports only annual data. The figures above are based on a (weighted) average for 2001 and 2002.

<sup>43</sup> See Section of Antitrust Law of the American Bar Association, Proving Antitrust Damages (1996), pp. 42-43 ("[P]]laintiffs normally need not disaggregate the harms attributable to different illegal acts of the defendant. 'Not requiring strict disaggregation of damages among the various unlawful acts of the defendant serves to prevent a defendant from profiting from his own wrongdoing and makes sense when damages arise from a series of unlawful acts intertwined with one another.''' (citing MCI Communications Corp. v. AT&T, 708 F.2d 1081, 1161 (7th Cir.), cert. denied, 464 U.S. 891 (1983)).

<sup>44</sup> See DeRamus Report, Section 9.2.5.

<sup>&</sup>lt;sup>45</sup> See DeRamus Report, Section 9.2.5.

had significant warranty claims, *e.g.*, its experience in 1993 with its "F-platform" transmissions, and I concluded that this prior, more significant event had no lasting impact in terms of reducing ZFM's market share.<sup>46</sup> This conclusion, in turn, informed my opinion that the G-platform warranty issues similarly were not sufficient to result in the dramatic decline in market share observed for the G-platform and other ZFM HD transmissions during Eaton's "OEM partnership period."

- I also did not observe any significant pattern of unusual warranty claims or other quality problems associated with the FreedomLine transmission, other than the typical issues that arise with any new product introduction in a demanding HD transmission environment. Certainly in comparison with Eaton's automated mechanical transmissions, the documents and data indicate that the FreedomLine was (and is) considered by the OEMs and end customers to be a high-quality, widely respected transmission. How the National quality problems can explain the demise of FreedomLine sales in the National quality problems can explain the given the highly favorable market acceptance of the FreedomLine in markets outside National National National Research (1998).
- As I discussed in my report, Eaton had at least as serious warranty issues with its own automated mechanicals, if not more so, particularly as compared with the FreedomLine. For example, 90% of Eaton's Autoshift transmissions built in 2000 had claims, and these claims accounted for 82% of the total number of claims. Thus, if warranty claims were an important determinant of market shares, it is reasonable to expect that sales of HD Transmissions would have increasingly shifted towards ZFM and away from Eaton, with the increased penetration of automated mechanicals. Indeed, one of the harms to competition I observe is the effect of Eaton's conduct in forcing customers who want increased automation in their transmissions to use Eaton transmissions rather than the superior ZFM FreedomLine transmissions.

<sup>&</sup>lt;sup>46</sup> See DeRamus Report, Section 9.2.5.

<sup>&</sup>lt;sup>47</sup> See DeRamus Report, ¶211.

<sup>48</sup> See DeRamus Report, Section 7.2.

<sup>&</sup>lt;sup>49</sup> See DeRamus Report, ¶206.

<sup>&</sup>lt;sup>50</sup> See DeRamus Report, Section 7.2.

<sup>&</sup>lt;sup>51</sup> EATON-00713075.

- Eaton claims that I fail to take into account ZFM's lack of a full product line and ZFM's decision to increase the price of the FreedomLine. These factors, however, do not provide explanations for ZFM's decline in market share that are unrelated to the anticompetitive conduct at issue. With regard to the full product line, OEMs and end customers have strong preferences for mixing and matching different components, as evident by the actions that Eaton and the OEMs had to take to meet Eaton's penetration targets specified in its LTAs. ZFM's lack of a full line of performance transmissions disadvantaged ZFM only because in Eaton's LTAs, Eaton made the rebates on performance transmissions contingent on OEMs purchasing a very large share of both linehaul and performance transmissions from Eaton. As discussed in my report, the fact that in the short run, ZFM did not offer an alternative to Eaton's monopoly in performance transmissions provided Eaton with leverage to exclude ZFM from the linehaul market. Start in the short run and the report of the report of the report of the short run and the report of the repo
- With regard to Eaton's allegations of higher ZFM prices, the fact that ZFM had to raise the price of the FreedomLine in early 2004 was a consequence of Eaton's successful "raising rivals' costs" exclusionary strategy it is not an explanation of ZFM's declining market share that is unrelated to the conduct at issue. As discussed in my report, by foreclosing ZFM from access to OEMs and end customers, Eaton prevented ZFM from reaching a scale sufficient to industrialize production of the FreedomLine in the U.S. and thereby minimize its production costs. It was thus Eaton's exclusionary conduct that prevented ZFM from lowering its prices and made the 2004 FreedomLine price increase necessary.

### 6. My damages analysis is not predicated on unreasonably high "but for" prices

(26) Contrary to Eaton's mischaracterization of my testimony, I have *not* assumed that "but for" transmission prices would have been higher than actual prices. As I testified in my deposition, while the "but for" manual transmission prices from the ZFM November 2000 SBP forecast are higher than other schedules of actual ZFM manual

<sup>52</sup> DeRamus Report, Section 8.

<sup>&</sup>lt;sup>53</sup> See, e.g., DeRamus Report, ¶108 and ¶¶175-176.

DeRamus Report, ¶226.

transmission prices, the FreedomLine prices in the forecast were lower than actual FreedomLine prices. On average, across both the FreedomLine and the ZFM manual transmission series, the "but for" prices implied by my damages analysis are *lower* than actual prices over the relevant period, and the use of actual prices would simply increase my estimate of damages by fully 60%. Even if I hold ZFM actual prices for the FreedomLine constant as of 2004, ZFM's "but for" damages are still 13% higher than the damages I derived using the prices implicit in the ZFM November 2000 SBP.

- (27)Further, even focusing only on manual transmissions, it is not the case that I have assumed – based on the ZFM SBP – that the prices of the same ZFM manual transmissions would have been higher in the "but for" world. As discussed in the President's Report prepared for the October 16, 2000 Board of Directors, ZFM intended to reduce the price of its base (9- and 10-speed) manual transmissions over the period covered by the SBP.<sup>55</sup> In fact, ZFM planned to release a number of multispeed and performance manual transmissions, such as an 11D (in competition with Eaton's 8LL performance transmissions) in October 2001, a 12/14-speed manual in April 2002, a 16-speed manual in October 2002, and possibly a 10-speed high torque in April 2003.<sup>56</sup> These transmissions are technologically more advanced, and thus have higher prices (and costs), than the base 9- and 10-speed manual transmissions that ZFM actually sold. Therefore, the inclusion of the (yet to be released) multi-speed and performance manual transmissions in the SBP forecast for the G-platform explains why the average per-unit price of G-platform transmissions in the SBP is higher than the actual average price of the 9- and 10-speed manual transmissions sold by ZFM.
- In any event, of primary importance for a damages estimate are the *incremental* profits that ZFM would have earned absent Eaton's anticompetitive conduct. Thus, the primary inputs for a damages estimate in this case is not an estimate of "but for" prices, but rather an estimate of ZFM's per unit incremental profits (or contribution margin) and "but for" market shares. I have conducted an extensive analysis to confirm that the prices and costs in the November 2000 SBP are consistent and provide a reliable basis for estimating ZFM's "but for" profits, as discussed below.

<sup>&</sup>lt;sup>55</sup> See, for example, ZFMA0365437-536 at 469 and 472.

<sup>&</sup>lt;sup>56</sup> See ZFMA0365437-536 at 477.

### 7. I have appropriately verified the reliability and reasonableness of the ZFM business projections used in my analysis

- (29) I conducted an extensive assessment of the reasonableness of using the ZFM November 2000 SBP in my analysis. I reviewed all of the business plans prepared by ZFM, as well as various presentations by ZFM management to the ZFM Board, including: the September 14, 1999 ZFM business plan; the March 10, 2000 ZFM Board of Directors Meeting presentation; the July 13, 2000 ZFM Board of Directors Meeting presentation; the October 16, 2000 Board Meeting minutes; and the October 16, 2000 President's Report prepared for the Board of Directors meeting.
- (30) As discussed in my report, after an extensive analysis of the documents, I used the ZFM November 2000 Strategic Business Plan (SBP) as the basis for some of my damages analyses, because that business plan was least affected by Eaton's conduct at issue.<sup>57</sup> In addition, the ZFM November 2000 SBP explicitly took into account recent market developments. The sales projections in that SBP had been revised downward due to the general market decline and Eaton's actions at the OEMs.
- (31) I also reviewed additional information to confirm the reasonableness of using the ZFM November 2000 SBP in estimating ZFM's damages, including, without limitation:
  - The November 2000 SBP shows that ZFM created a "Revised Plan" for FY 2001 in which unit and net sales were 40% lower than previously forecast in its "Conservative Plan." <sup>58</sup>
  - The November 2000 SBP includes both forecast *and actual* figures, and I verified that the forecast profit margins were consistent with the actual profit margins. For example, the SBP reports an actual per unit margin in FY 2000 of \$1,014, compared to a FY 2001 forecast per unit margin of \$1,169 (G-platform).
  - The profit margins in the November 2000 SBP are consistent with ZFM's actual financials. For example, the per unit contribution margin for all ZFM HD

<sup>57</sup> See DeRamus Report, Sections 11.2 and 11.3.

<sup>&</sup>lt;sup>58</sup> See ZFMA0357342-351 at 348.

transmissions calculated using ZFM's P&L statements for FY 2002 was \$959, as compared to the November 2000 SBP forecast for the same year of \$949.

- The SBP was prepared by ZFM management, scrutinized by its Board of Directors, and revised according to the Board's explicit direction.
- ZFM management and its Board had many years of experience in selling HD transmissions, and thus had significant expertise in developing a reasonable SBP.
- ZFM's projections of profit margins for the FreedomLine are likely to be reliable, given ZF's extensive experience with manufacturing and selling the same automated mechanical transmission in Europe (and elsewhere).
- The profit margins in the ZFM November 2000 SBP are consistent with (and likely lower than) Eaton's margins on comparable products. For example, while ZFM's average per unit contribution margin in the SBP for 2001-2005 is \$1,054, Eaton's average per unit margin on linehaul transmissions for 2006 and 2007 is \$1,022. 59 While ZFM's contribution margin only subtracts variable costs, the standard cost used to calculate Eaton's margin likely includes some allocated fixed costs, 60 and thus Eaton's contribution margin would be higher if calculated on a comparable basis.
- In Eaton's "Profit Plan Review" from 2000, Eaton reported its per unit profits for several manual HD transmissions. Eaton's reported profits are in the range of \$877 to \$1,520 per unit for the listed 9- and 10-speed transmissions. Eaton's per unit profits for performance transmissions are considerably higher, ranging from \$1,570 to \$2,312 per unit. While these profits likely understate Eaton's per unit contribution margin, as they appear to include more than just direct manufacturing costs, they confirm that ZFM's 2000 SBP per unit profit forecasts are reasonable.

Eaton's cost data for linehaul transmissions are available only starting in August 2005. I thus chose to consider the average of the only two full years available, i.e. 2006 and 2007.

The available data for Eaton reports only unit standard cost, without specifying or breaking down the individual cost items included in standard cost. I was therefore unable to exclude some of the allocated overhead costs that are likely to have been included in standard cost. The unit cost for ZFM have instead been calculated by using only variable cost items, such as direct labor, material, freight and the variable part of the burden (see Table 6 in my report).

- In my report, while I consider contribution margin to be appropriate in estimating ZFM's damages, to be conservative I also estimate ZFM damages based on various other (lower) measures of operating profits, *i.e.*, assuming that ZFM would have incurred additional operating and fixed costs to achieve the sales volume predicted by my estimate of ZFM's "but for" market shares. For example, in two of my damage estimates, I include between \$199 and \$220 million in *additional* operating and fixed costs over 2000 2009 (on a present value basis) relative to my first measure of damages based on ZFM's contribution margin. Thus, even if the price and contribution margin estimates used in some of my computations were unrealistically high (which they are not), they would be more than balanced by the conservative assumptions regarding incremental operating and fixed costs in the other methods.
- Independently of the ZFM November 2000 SBP, I also constructed an econometric model of ZFM's "but for" market shares, a standard economic technique used to estimate damages. The results of that model provide an alternative damage estimate as well as confirm the reasonableness of the share projections in the ZFM SBP, as evident in Table 3 of my report. When "base case" econometric model using July 2000 as the beginning of Eaton's anticompetitive conduct shows that ZFM's forecast shares in the SBP are *lower* than in the econometric model for every year except 2005. An alternative econometric model using 1999 as the beginning of Eaton's anticompetitive conduct shows even higher ZFM market shares than my "base case" econometric model, with shares that are significantly higher than the SBP in all years.
- Independently of the ZFM November 2000 SBP, I also derive a damages estimate using Eaton's own operating profit margins. <sup>63</sup> Of the five different approaches I use to estimate damages, this approach provides the median result. To be conservative, I apply an estimate of Eaton's *operating profit* (rather than contribution margin) for linehaul transmissions to the incremental volume of ZFM's "but for" sales. This approach effectively assumes that on each incremental ZFM's transmission sale, ZFM would have incurred additional operating and fixed costs at the same average level as Eaton (allocated on a per unit basis), *in addition to* the operating and fixed costs that ZFM already incurred. As I discussed in my deposition testimony, the fact that I have

<sup>61</sup> See DeRamus Report, Sections 11.6 and 11.7.

<sup>62</sup> See DeRamus Report, p. 134.

<sup>&</sup>lt;sup>63</sup> See DeRamus Report, Section 11.10.

not added back approximately \$79 million in operating losses incurred by ZFM during the damage period<sup>64</sup> has the highly conservative result that ZFM's "but for" profit margin using this approach is considerably lower than Eaton's.

#### 8. I have reasonably estimated ZFM's FreedomLine sales

- (35) In my damages analysis, I appropriately conclude that ZFM would have sold significant volumes of its FreedomLine transmission absent Eaton's anticompetitive conduct. First, I use a conservative approach to estimating the growth of the share of FreedomLine sales in total market sales, using a polynomial curve rather than a linear trend-line, such that the forecast of FreedomLine sales reaches a maximum of 13.6% of HD linehaul sales during 2006-2009.
- (36) Second, the estimates of automated mechanical transmissions in my analysis are for the FreedomLine alone; I make no assumption regarding the percentage of sales that Eaton would have made with its automated mechanical transmissions. Indeed, given Eaton's technologically inferior product (its 3-pedal Autoshift), the significant reliability problems with both its Autoshift and its Ultrashift, and its significant delays in releasing a 2-pedal product (relative to the FreedomLine), I would not expect Eaton to have captured a particularly large percentage of automated mechanical sales, absent its anticompetitive conduct.
- (37) Third, I considered a range of factors in assessing the reasonableness of ZFM's forecast of 2000-2005 FreedomLine sales. For example, as discussed in my report, this result is conservative, as it effectively assumes that the FreedomLine would achieve a market penetration level in NAFTA that is significantly below its market penetration in Europe. <sup>66</sup> I expect similar cost-benefit considerations that drove European customers to adopt the Astronic to be present in the U.S., e.g., reduced training costs, increased fuel efficiency, improved driver safety, improved driver retention, etc. I also observe evidence in the documents of significant pent-up demand for the FreedomLine transmission, a trend that the OEMs also recognized by

 $<sup>^{64}\,</sup>$  Sum of ZFM operating profit (loss) from July 2000 through FY2007.

<sup>65</sup> See DeRamus Report, Section 11.2.

<sup>66</sup> See DeRamus Report, Section 11.2.

- early 2000 2001. My estimate of a flattening of demand for the FreedomLine is conservative, given the nearly exponential growth rate observed in FreedomLine sales immediately after its introduction, until ZFM was forced to abandon its plans to localize production in the U.S. due to Eaton's conduct.
- (38) Fourth, as discussed in my report, by depriving ZFM of the ability to compete for a sufficient share of the market to localize production in the U.S., Eaton's conduct led to increased costs and hence prices for ZFM's FreedomLine transmissions. <sup>67</sup> Absent Eaton's "raising rivals' cost" strategy, I would expect ZFM's FreedomLine costs and prices to be significantly lower, which in turn would have stimulated increased demand for automated mechanical transmissions. The current share of Eaton's automated mechanical transmissions as a percentage of total HD transmissions is likely to significantly underestimate the FreedomLine's "but for" share of HD transmission sales, as Eaton's sales reflect market outcomes that are themselves fundamentally affected by Eaton's anticompetitive conduct. Absent Eaton's conduct, ZFM was well-positioned and incentivized to compete aggressively with its FreedomLine technology, as the technological innovation of the FreedomLine gave ZFM a means to significantly differentiate its products from Eaton's.
- (39) Fifth, as discussed above, ZFM's forecast of its *total* share was consistent with the results of my econometric forecast. My econometric model is conservative, since it is predominantly calibrated on ZFM's manual sales, and thus it is unlikely to adequately capture ZFM's incremental "but for" share due to its introduction of the FreedomLine. Thus, if one were to reduce my estimate of ZFM's "but for" FreedomLine sales, I would need to increase my estimate of ZFM's manual sales. As is evident in my report, however, my estimate of damages to ZFM is not sensitive to the "mix" of lost sales as between manual and FreedomLine transmissions. Indeed, if one were to decrease the volume of FreedomLine transmissions and increase the volume of manual transmissions in my damages model, the damages to ZFM would *increase*, not decrease. In my damages model, the weighted average contribution margin for manual transmissions is approximately \$1,170 per unit on average, compared with approximately \$1,023 for the FreedomLine Transmission. Thus, any

<sup>&</sup>lt;sup>67</sup> See DeRamus Report, Figure 22 and ¶¶238-241.

<sup>&</sup>lt;sup>68</sup> See DeRamus Report, Section 11.6.

shift in the incremental "but for" volume away from the FreedomLine and towards manual transmissions would simply increase ZFM's damages.

#### 9. I have appropriately estimated ZFM's lost enterprise value

- In estimating damages to ZFM from Eaton's anticompetitive conduct, I estimate both ZFM's past lost profits and its going-forward lost enterprise value using standard, well-accepted methods of analysis. In estimating ZFM's lost enterprise value, I use comparable publicly traded companies to estimate a "multiple" to apply to alternative measures of ZFM's profits. ArvinMeritor and Eaton constitute reasonable "comparables," as confirmed by two alternative sets of comparables. In estimating ZFM's lost enterprise value, I use data from a range of years to reduce the potential variance associated with relying on a specific point in the business cycle. I use ZFM's "but for" financials for FY 2006-2008, as 2008 was the last full year for which I had estimated ZFM's but for profits, and this three-year period spans the business cycle. I use 2005-2007 for the comparables data, as this is the most recent three-year period with complete financials as of the date of my report (due to lags in reporting by many publicly traded companies). Using ZFM "but for" financials for 2005-2007 rather than 2006-2008 would simply increase my estimate of lost enterprise value.
- (41) I do not consider it necessary to apply "multiples" from a specific date to ZFM's "but for" profits for that same date. The use of one date or another can lead to large volatility in the valuation estimate, due to either financial market conditions unrelated

See, e.g., Stephen H. Kalos, "Antitrust" In Litigation Services Handbook, The Role of the Financial Expert, 4<sup>th</sup> ed. edited by Roman L. Weil, Peter B. Frank, Christian W. Hughes and Michael J. Wagner (Hoboken, NJ: John Wiley & Sons, Inc., 2007), 24.11; Robert E. Hall. and Victoria A. Lazear, "Estimating Economic Losses in Damages Awards (New)" In Litigation Services Handbook, The Role of the Accountant as Expert, 2<sup>nd</sup> ed. 1999 Cumulative Supplement, edited by Roman L. Weil, Michael J. Wagner and Peter B. Frank (New York, John Wiley & Sons, Inc., 1999), 29A.2.; Victoria A. Lazear, "Estimating Lost Profits and Economic Losses" In Litigation Services Handbook, The Role of the Financial Expert, 3<sup>nd</sup> ed. edited by Roman L. Weil, Michael J. Wagner and Peter B. Frank, (New York: John Wiley & Sons, Inc., 2001), 5.2.; Patrick A. Gaughan, Measuring Business Interruption Losses and other Commercial Damages (Hoboken, NJ: John Wiley & Sons, Inc., 2004), 70; Robert E. Hall and Victoria A. Lazear in "Reference Guide on Estimation of Economic Losses in Damages Awards" in Moore's Federal Practice Reference Manual on Scientific Evidence (New York: Matthew Bender & Co., Inc., 1997) 478; and Section of Antitrust Law, American Bar Association, Proving Antitrust Damages: Legal and Economic Issues (1996) 36; 132-135.

<sup>&</sup>lt;sup>70</sup> See DeRamus Report, Sections 11.11 and 11.12.

<sup>&</sup>lt;sup>71</sup> See DeRamus Report, Section 11.12.

to the specific business at issue (as in the case of the October 2008 – February 2009 financial market meltdown) or business-specific volatility that is unlikely to be representative of the company's average future cash flows. Using FY 2006 for both the "multiple" and ZFM's "but for" profits, for example, would imply a "but for" lost enterprise value considerably *higher* than the estimate of lost enterprise value in my report (2006 is the peak year for ZFM's "but for" profits but provides slightly lower multiples for the comparables). Including both 2007 and 2008 in an averaging approach provides a valuation that is less sensitive to the selection of any single year, and it produces a more conservative estimate of ZFM's damages.

- (42) A related issue is whether the current period of significant financial market turmoil since October 2008 provides a more reasonable benchmark to assess the "but for" value of ZFM's business than a benchmark derived under normal financial market conditions. Basing a damages analysis on a period of unprecedented financial turmoil, however, is unlikely to provide a reliable estimate of enterprise value. The value of a business is the discounted present value of its future cash flows. In selecting a "multiple" for a given valuation context, it is thus important to consider whether the multiples and the profits to which they are applied reflect long-run expectations of average future cash flows, appropriately risk-adjusted. Relying on financial market data for the period from October 2008 February 2009 does not meet these criteria.
- I confirmed the reasonableness of my "comparables" results by cross-validating them against the results that would be obtained by modeling the future cash flows of ZFM. In this cross-validation analysis (often described as the "Gordon growth model"), I used a growth rate based on the applicable Producer Price Index (PPI) and an appropriate discount rate provided by a widely respected, independent source of information (the Ibbotson Cost of Capital Yearbook for 2008). Thus, if my choice of comparables or the use of a three-year average time period to estimate the ZFM lost enterprise were for some reason inappropriate (or, as alleged by Eaton, "rigged"), I would expect there to be a significant discrepancy between my results obtained by these very different methods. As discussed in my report, this approach produces a

<sup>&</sup>lt;sup>72</sup> For a discussion of this approach to valuation, see, Section of Antitrust Law American Bar Association, *Proving Antitrust Damages*, 1996, pp. 128-132; for a discussion of discount rates, see, pp. 119-122.

<sup>&</sup>lt;sup>73</sup> DeRamus Report, ¶316.

valuation that is approximately \$51 million *higher* than applying the "multiple" approach to those same cash flows. This confirms that I have used a reasonable multiple – from an appropriate period – in estimating the lost enterprise value of ZFM due to Eaton's anticompetitive conduct.

- (44) Eaton asserts that my damages analysis is inconsistent with the guidance of IRS Revenue Ruling 59-60. The purpose of my estimate of ZFM's enterprise value is to measure damages suffered by ZFM due to Eaton's anticompetitive conduct. The stated purpose of IRS Revenue Ruling 59-60 is "to outline and review... factors to be considered in valuing shares of the capital stock of closely held corporations for estate tax and gift tax purposes" by appraisers. Thus, even taken at face value, the guidance of IRS Revenue Ruling 59-60 is not applicable to this case.
- (45) Moreover, not withstanding its lack of applicability, IRS Revenue Ruling 59-60 in fact supports the assumptions and analytical procedures I applied in my analysis. IRS Revenue Ruling 59-60 states, *inter alia*, that an appropriate valuation "will depend upon the circumstances in each case," as there is no generally applicable formula to different valuation issues; "[w]hen a stock... is traded in an erratic market, some other measure of value must be used;" "value has a close relation to future expectancy;" and "detailed profit-and-loss statements should be obtained and considered for a representative period immediately prior to the required date of appraisal, preferably five or more years." My analysis is consistent with each of these statements and is not contradicted by any other guidance in the Revenue Ruling.

<sup>&</sup>lt;sup>74</sup> IRS revenue Ruling 59-60, Section 1 (emphasis added).

<sup>&</sup>lt;sup>75</sup> Id., Section 3.01.

<sup>&</sup>lt;sup>76</sup> Id., Section 3.03.

<sup>&</sup>lt;sup>77</sup> Id., Section 4 (a).

<sup>&</sup>lt;sup>78</sup> Id., Section 4 (d).

Declaration	of	David W	/. DeF	Ramus,	Ph.	D.
-------------	----	---------	--------	--------	-----	----

I declare under penalty of perjury that the foregoing is true and correct.

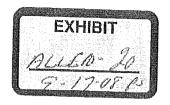
924L

June 11, 2009

David W. DeRamus, Ph.D.

Date

### EXHIBIT 10







DX 18



ZF Meritor Board Meeting July 15, 2003

## ZF Meritor Board of Directors Meeting July 15, 2003

I. Opening Remarks	9:00 AM	W. Vogel
II. Acceptance of Minutes Dated 3/20/03	9:15 AM to 9:30 AM	M. Hawley
III. Full Year 2003 Forecast	9:30 AM to 10:00 AM	D. Coleman
IV. 2004 – 2008 Business Plan Summary	10:00 AM to 10:30 AM	D. Coleman

2



ZF Meritor Boarq Meeting July 15, 2003

# ZF Meritor Board of Directors Meeting July 15, 2003

V.	Break	10:30 AM to 10:45 AM	·
VI.	Old Business	10:45 AM to 11:15 AM	R. Martello
VII.	New Business	11:15 AM to 11:45 AM	R. Martello
VIII.	LUNCH	11:45 AM TO 12:30 PM	
IX.	Shareholders Meeting and Discussion	12:30 PM to 6:00 PM	

3



ZF Meritor Board Meeting
July 15, 2003

## ZF Meritor Warch 20, 2003 Meeting Minutes

4

### ZF MERITOR LLC

### BOARD OF DIRECTORS MEETING MINUTES

March 20, 2003

In accordance with Section 5.3(a) of the Amended and Restated Limited Liability Company Agreement (the "Joint Venture Agreement") of ZF Meritor LLC (the "Company"), a regular meeting of the Board of Directors of the Company was held at the Brown Hotel, Louisville, Kentucky, commencing at 2:00 p.m. on Thursday, March 20, 2003. The following members of the Board of Directors participated in the meeting (in person, unless otherwise noted):

**ZF Member Representatives** 

**ArvinMeritor Member Representatives** 

Wolfgang Vogel Rolf Lutz Otto Schafhauser Thomas Gosnell Dennis Kline

Also participating in the meeting at the request of the Directors were the following individuals:

Richard Martello, President of the Company
Robert Guy, Vice President of the ArvinMeritor Member
Dave Coleman, Chief Financial Officer of the Company
Charles Allen, Director of Sales and Engineering of the Company
Carl Myers, Chief Financial Officer of ZF North America
Hans Collenberg, Division President, ZF NAO
Tony Wooten, Company Director of Human Resources
Michael S. Hawley, legal counsel to, and Secretary of, the Company

Wolfgang Vogel, Chairman of the Board of the Company, presided at the Meeting. Michael Hawley acted as recording secretary, taking minutes of the Meeting. An Agenda for the Meeting was presented to the Board, and each of the items on the Agenda was taken up in the order listed, unless otherwise noted. Significant items of discussion, and actions by the Board with respect to the Agenda items, were as follows:

### I. Review and Approval of Minutes.

The first order of business was review and approval of the minutes from the previous meeting. Upon motion duly made and seconded, the Board approved the Minutes of the November 12, 2002 meeting of the Board of Directors.

### II. CFO Report.

Mr. Coleman was then called upon to present a financial report.

### a. 2002 Audited Financials.

Mr. Coleman initially reviewed the financial adjustments resulting from the 2002 audit by Deloitte & Touche, LLP. A summary of those adjustments and a P&L breakdown are attached to these Minutes as <a href="Exhibit A">Exhibit A</a> (page 8) and <a href="Exhibit B">Exhibit B</a> (page 9), respectively. Mr. Coleman addressed in particular the adjustments relating to the writedown of various G Platform transmission assets and warranty accrual adjustments.

### b. 2003 Full Year Forecast.

Mr. Coleman then presented an Executive Summary of the 2003 Actual/Forecast vs. AOP. That Summary is attached to these Minutes as  $\underline{\text{Exhibit}}$   $\underline{\text{C}}$  (page 10). There was extensive discussion of the particulars appearing in that Summary, with a focus on sales and PBT.

The Board discussed the timeliness of the financial data presented to the Board and directed as follows:

At future Board meetings, Mr. Coleman was asked to present the most current Company financial information available. To the extent that information becomes available following the time when pre-Board meeting material is distributed, the updated information is to be included in the Board meeting materials.

Mr. Coleman then addressed the Profit and Cash Causals (both year-to-date actuals and forecasts, versus AOP) data with respect to which is attached to these Minutes as Exhibits D. E and F (pages 11, 12 and 13). There was significant discussion about the contribution margin of additional sales and conflicting indications from the data relating to profitability and increased volume.

The Board directed that Mr. Coleman evaluate and report back to the Board on the volume and profitability implications of the Causal Reports and the affect on profit (or loss) of increased sales volume.

The discussion then turned to appropriate accounting for warranty matters. The role of Mike Veillette in this process was described, and it was noted that Mr. Veillette sets accrual rates twice each year and that accrual amounts are calculated quarterly based on those rates.

The Board directed that Mr. Coleman evaluate again the accounting system for warranty accruals and report to the Board on

when warranty claim improvement (evidenced by field experience) might be reflected in warranty financial reporting.

The Board then discussed the need for more frequent monitoring of the financial condition of the Company, resulting in the following directive:

The Board directed that Mr. Coleman reinstitute frequent and regularly scheduled meetings of the Audit Committee so that the financial condition of the Company can be monitored, and corrective action taken, in a timely fashion.

#### c. Revised Financials for 2004-2008.

The assumptions underlying the 2004-2008 Business Plan were then discussed, with emphasis on the three primary areas of concern, those being labor costs, currency fluctuations and warranty uncertainty. It was noted by Mr. Coleman that volume projections have remained unchanged since the breakeven analysis previously performed.

In concluding this portion of the Meeting, the Board discussed various opportunities for cost reduction with Company suppliers and the possibility of bargaining with those suppliers on a system-wide basis. With respect to these matters, the Board concluded as follows:

Mr. Martello is to provide the Board with a listing of vendors and the value of purchases from each.

Mr. Gosnell and Mr. Vogel are to exchange background information with respect to each Member's respective primary commodity suppliers.

### III. Strategic Options

Mr. Martello then led a discussion of the various strategic options available to the Company, which include (i) continuation of Company operations "as is", (ii) shutdown and redeployment of assets of the Company, (iii) possible increased utilization of the Laurinburg facility by one or both of the Members, (iv) movement of Laurinburg operations to facilities of one or both of the Members and (v) possible combination with other manufacturers.

Mr. Martello presented various aspects of each alternative, along with supporting financial projections. During the course of the discussion, considerable attention was given to options relating to consolidation of operations throughout the systems of the Members. Mr. Lutz presented preliminary possibilities involving the Gainesville, Georgia facility of the ZF Member, and Mr.

Gosnell did the same with respect to possibilities involving operations of the ArvinMeritor Member.

Following a candid discussion of the fundamental importance of the Company to each of the Members, the Board tentatively concluded that the most promising strategies would involve (in this order) (i) continuing operations of the Company at the Laurinburg facility but with significant additional utilization of that facility by the ArvinMeritor Member and (ii) relocating elements of the Company's Laurinburg operations to the ZF Member's facility in Gainesville, Georgia (or to other companies and suppliers). In conjunction with that discussion, it was agreed that, in any event, cash flow management must be a priority so that the Company's cash flow position can be stabilized and the need for regular or significant cash infusions from the Members eliminated. Following that discussion, the following commitment was made:

Mr. Gosnell is to report back to the Board (within a 30 to 90 day period, but hopefully toward the earlier end of that range) on the possibilities for additional utilization of the Company's Laurinburg facility by the ArvinMeritor Member.

### IV. Old Business

Mr. Allen was then called upon to discuss certain matters of old business. He provided a warranty report update, which included a G Platform Warranty Performance rainbow chart [attached to these Minutes as <a href="Exhibit G">Exhibit G</a> (page 31)] and various warranty corrective actions that have been taken (or are in process) with respect to 9 & 10 speed transmissions.

Mr. Allen then discussed briefly the status of patent litigation involving (i) the ESS system and (ii) an interference claim lodged with respect to one of the Company's torque prediction patents.

### Redacted

Mr. Wooten then briefly presented to the Board an updated environmental performance report.

### V. New Business

Mr. Martello then led a discussion of various items of new business. The initial matter involved deliberations of, and recommendations from, the Compensation Committee of the Company. The Board made the following determinations with respect to compensation related matters:

Subject to continuation of the program by the ArvinMeritor Member, the Board approved reinstatement of the Savings Plan match and approved the ICP Percentage match for fiscal year 2003.

The next items of new business related to requested capital expenditure authorizations, those being (i) the pressing need to make a decision on FreedomLine industrialization, (ii) manual transmission cost reduction systems, (iii) shift knob re-sourcing and (iv) implementation of the ERP/SAP system.

The Board directed that Mr. Coleman provide to the ZF Member (through Mr. Schafhauser and Mr. Vogel) and to the ArvinMeritor Member (through Mr. Gosnell and Mr. Guy) an appropriation request justifying expenditures with respect to FreedomLine industrialization. That matter will be taken up at the next Board meeting.

The Board approved the proposals relating to manual transmission cost reduction and shift knob re-sourcing, provided that Mr. Shah and Mr. Hardig are involved in the testing and release of any changes in order to assure that there are no quality problems respecting the same.

The Board directed that the ERP/SAP implementation remain on hold pending the decision on future utilization of the Laurinburg facility.

The next order of new business was a discussion of the potential lease and transfer of various machine tooling and housing assets of the Company to vendors (in exchange for economic concessions from those vendors).

The Board directed that matters relating to the lease or transfer of such assets be referred to the Audit Committee for review and approval.

The next order of new business was a brief discussion of pressure being applied by Company suppliers to raise prices because of low volume component orders from the Company. Following a discussion of this issue the Board concluded as follows:

0256723.02

The Board directed that the Company discontinue production of SureShift and directed that price increases from suppliers for other components be rejected.

The next order of new business was a discussion of quality control processes, with the Board directing as follows:

The Company is to utilize the best practices from each Member in continuing to refine its quality control processes, and Ashok Shah is to be consulted on a frequent and regular basis concerning development and operation of those processes.

The final order of new business was a discussion of the schedule for future Board meetings. It was noted that the previously scheduled meeting on July 24, 2003 in Friedrichshafen, Germany conflicts with other events and will need to be rescheduled.

Mr. Vogel and Mr. Gosnell are to check the schedules of the Board members representing each Member, respectively, and are to reset the date of the next meeting of the Board by informing all members of the Board, Company management and the Secretary of that new date.

The regularly scheduled Board meeting on December 2, 2003 in Troy, Michigan was confirmed, as previously scheduled.

### VI. Adjournment.

The Board then commended Mr. Allen on the article in <u>Heavy Duty</u> <u>Trucking</u> (March 2003) which favorably cited the FreedomLine technology.

There being no further business to come before the Board, upon motion duly made and seconded, the meeting was adjourned.

Michael S. Hawley, Secretary

Approved:

Wolfgang Vogel, Chairman

256723.03



ZFM Board M. .ing March 20, 2003

# 2002 Audit Summary

State of the state	Transmi	ssions	Clutc	h	Total ZFM		
	Sales	PBT	Sales	PBT	Sales	PBT	
2002 September Close	\$65,149	(\$16,687)	\$19,958	(\$2,060)	\$85,107	(\$18,747)	
2002 D&T Audited Statements	64,704	(23,676)	0	343	64,704	(23,333)	
Adjustments	(\$445)	(\$6,989)	(\$19,958)	\$2,403	(\$20,403)	(\$4,586)	

Exhibit A



ZFM Board M. ing March 20, 2003

# 2002 Audit P&L Adjustments

•	Transmissions	Clutch	Total
Impairment (1)	(\$10,041)		(\$10,041)
Post JV Accrual (2)	(3,118)	2,016	(1,102)
Adjust Shut Down Serverence Accrual		521	521
CEPA	(520)		(520)
Pre JV Warranty (3)	3,784		3,784
Book Earnout (4)	2,951		2,951
Other	(45)	(134)	(179)
Total 2002 Adjustments	(\$6,989)	\$2,403	(\$4,586)

5 November 12 Board Meeting Minutes Follow-Up Items Including the Going Concern Letter (5)

Exhibit B



ZFM Board M. .ing March 20, 2003

# **Executive Summary 2003 Actual/Forecast vs. AOP**

	Janua	ry Year-To	o-Date		Full Year	
	2003 FCST	AOP	B/(W)	2003 FCST	AOP	B/(W)
Units	4,482	4,359	123	15,828	18,890	(3,062)
Sales	\$16,885	\$15,002	\$1,883	\$61,770	\$66,095	(\$4,325)
PBT	(\$9,170)	(\$7,705)	(\$1,465)	(\$20,933)	(\$17,150)	(\$3,783)
Capital	\$562	\$2,003	\$1,441	\$4,000	\$4,097	\$97
Accounts Receivable Days	40.5	40.0	(0.5)	35.6	37.8	2.2
Accounts Payable Days	45.7	42.3	3.4	38.0	37.1	0.9
Inventory Turns (Net)	8.1	10.7	(2.6)	10.9	12.2	(1.3)
Head Count	160	152	(8)	174	160	(14)
Operating Cash Flow (Excl. Earnout)	(\$10,833)	(\$9,850)	(\$983)	(\$28,783)	(\$27,180)	(\$1,603)
Debt	\$59,478	\$61,717	\$2,239	\$69,983	\$71,594	\$1,611
Change In Debt	\$3,598	\$2,617	(\$981)	\$14,103	\$12,500	(\$1,603)

Exhibit C



ZFM Board Mc\_ding March 20, 2003

# Profit Causal 2003 January YTD Actuals Vs. AOP

	Transm	ission	
	Sales	PBT	
Jan 03 YTD Actuals	\$16,885	(\$9,170)	
Jan YTD AOP	15,002	(7,705)	
Better/(Worse)	\$1,883	(\$1,465)	
Volume and Mix	\$1,110	(\$155)	Freedom 93 and G 30 Units Higher Than AOP.
Pricing-CE/PA	773	773	Removed Freightliner Pricing.
Material Variances		(201)	\$ Per Euro in AOP = .93. Actual \$ Per Euro At 1.07.
Freight Variance		(257)	Customs and Duty Understated in AOP.
Labor and Burden		(563)	Inefficient volume levels; benefits of laid-off workers; launch of the new assembly line
Warranty Volume		(20)	
Warranty Rate		(1,313)	Waiting for Reserve Analysis. Still Maintaining AOP Reserve Levels.
Onereting Eunenese		(10E)	Higher Policy and 7EE Engineering Charges
Operating Expenses		(185)	
Depreciation		139	Less Spending and Slower Capitalization of FreedomLine™. Evaluating Impact of Impairment.
Interest Expense		342	2.7% Actual Vs. 4% in AOP.
Other Income/Expense		(25)	Evaluating Impact of Impairment. Clutch \$154K.
Total PBT Change	\$1,883	(\$1,465)	Exhibit D



# Profit Causal 2003 Full Year FCST Vs. AOP

FY 03 Actual/Fcst AOP Better/(Worse)	January YTD           Sales         PBT           \$16,885         (\$9,170)           15,002         (7,705)           \$1,883         (\$1,465)	Full Year Sales PBT \$61,770 (\$20,933) 66,095 (17,150) (\$4,325) (\$3,783)	<u>)</u>
Volume and Mix Pricing-CE/PA Material Variances Freight Variance Labor and Burden Warranty Volume Warranty Rate	\$1,110 (\$155) 773 773 (201) (257) (563) (20) (1,313)	(6,897) (3,210 2,572 2,572 (2,884 (267 (898 540 (1,578	Eliminated \$1,723 Freightliner Pricing.  ) Steel (160), Exchange (1,400)-Act93\$/Euro, Vs. 1.07\$/Euro. Industrialization (800).  ) Customs and Duty Understated in AOP.  Inefficient volume levels; benefits of laid-off workers; launch of the new assembly line  Lower Units
Operating Expenses Depreciation Interest Expense Other Income/Expense Total PBT Change	(185) 139 342 (25) \$1,883 (\$1,465)	139 95 <u>4</u> 47	<ul> <li>Less Spending and Slower Capitalization of FreedomLine™. Evaluating Impact of Impairment.</li> <li>Lower Debt and Rates 2,7% Vs. 4%.</li> <li>Includes \$154K Clutch</li> </ul>

Exhibit E

ZFM Board Mc\_ding March 20, 2003

# Cash Causal 2003 February YTD Vs. AOP

and the state of t	Januar	y YTD Act	ual	Fu	I Year FC	ST
	Actual	AOP	B/(W)	Actual	AOP	B/(W)
Net Income	(\$9,170)	(\$7,706)	(\$1,464)	(\$20,933)	(\$17,150)	(\$3,783)
Warranty Accruals	(2,091)	(759)	(1,332)	(4,324)	(3,286)	(1,038)
Depreciation	(1,094)	(1,600)	506	(3,639)	(4,143)	504
Net Income Without Warranty & Depreciation	(\$5,985)	(\$5,347)	(\$638)	(\$12,970)	(\$9,721)	(\$3,249)
Inventory	(\$2,288)	\$1,427	(\$3,715)	(\$1,645)	(\$1,753)	\$108
Accounts Receivable	7,111	2,401	4,710	2,966	(1,912)	4,878
Accounts Payable	(3,819)	(2,604)	(1,215)	(2,602)	746	(3,348)
Other Assets	107		107	172	55	117
Other Liabilities	(1,200)	(22)	(1,178)	(623)	618	(1,241)
Warranty Payouts Transmissions	(3,100)	(1,934)	(1,166)	(6,567)	(5,812)	(755)
Warranty Payouts & Other Cash for Clutch	(1,095)	(1,768)	673	(3,514)	(5,304)	1,790
Capital	(562)	(2,003)	1,441	(4,000)	(4,097)	97
Net Cash Flow from Operations	(\$10,831)	(\$9,850)	(\$981)	(\$28,783)	(\$27,180)	(\$1,603)
Earnout	7,233	7,233	0	14,680	14,680	0
Net Increase/(Decrease) in Cash	(\$3,598)	(\$2,617)	(\$981)	(\$14,103)	(\$12,500)	(\$1,603)
Beginning Debt	\$55,880	\$59,100	\$3,220	\$55,880	\$59,200	\$3,320
Ending Debt	\$59,478	\$61,717	\$2,239	\$69,983	\$71,591	\$1,608

Exhibit F



ZFM Board Mc\_ding March 20, 2003

### G Platform Warranty Performance Claims Thru January 2003

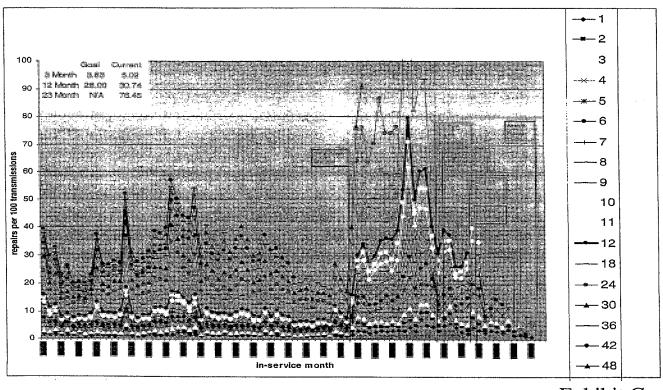


Exhibit G





### Action Items from March 20, 2003 Meeting

- 1. Mr. Coleman to Present Latest Financial Data Available Complete.
- 2. Mr. Coleman to Send to The BOD A Better Explanation of Causal for the Year-To-Date Profit Deterioration Complete E-Mail Dated 4/4/03.
- 3. Mr. Coleman to Re-Evaluate Warranty Financial Information This Was Done Again in Preparation for the July 15, 2003 Board of Directors Meeting.
- 4. Mr. Coleman to have More Frequent Audit Committee Meetings Complete.
- 5. Mr. Martello to Provide a Listing of Vendors and Their Purchases Complete. E-Mail dated 3/26/03.
- 6. Mr. Gosnell and Mr. Vogel to Exchange Purchasing Information with Their Purchasing Managers Feedback from ZFF's Mr. Regenscheit Received.
- 7. Mr. Gosnell to Report Back to the Board of Directors the Possibility of ArvinMeritor Utilizing the Laurinburg Facility Completed in the April Teleconference and Reconfirmed in E-Mail Dated 6/20/03.
- 8. Mr. Allen to Continue Vigorous Defense of Eaton Patent Interference Update in July 15, 2003 Meeting.
- 9. Compensation Committee Recommendation:
  - Approval of Reinstating Savings Plan Match On Hold Until After July 2003 Board Meeting
  - Approval of Change in ICP Match Communicated
- 10. Mr. Coleman to Re-Submit FreedomLine® Industrialization Justification On Hold Until Outcome of July Board Meeting.

5





# ZF Meritor 2003 Full Year Forecast

6





### ZF Meritor 2003 Full Year Forecast

			FY 2003 (\$0	000)		
		June YTD Actuals	B/(W) Plan	Full Year Forecast	B/W) Plan	
Sales		\$38,802	(\$3,880)	\$53,568	(\$12,527)	(o1/h)
PBT	U	(\$14,759)	<b>(\$237)</b> (	(\$26,160)	(\$9,010)	)
Cash		(\$12,692)	(\$1,677)	(\$17,552)	(\$5,052)	•
Debt		\$68,572	\$1,529	\$73,432	(\$1,846)	
			began yv.	71.6 m.	lins	7





ZF Meritor Board Meeting July 15, 2003

EUUU I DI VS. AUI	2003	PBT	Vs.	AOF
-------------------	------	-----	-----	-----

		FY 2003 JU	NEYTD	1		FY 2003 F	FCST		
	ACTUALS	AOP	B/(W)	Change	FCST	AOP		Change	
CIVILIAN SALES BASE	\$37,912	\$43,289	(\$5,377)	-12%	\$52,251	\$67,174	(\$14,923)	-22%	YTD actual units F 1,662 vs. AOP 1,376
FLORENCE SALES	3,883	3,564	319	9%	4,912	4,753	160		YTD actual units G 8,791 vs. AOP 10,583
PLAINFIELD SALES	1,484	1,278	206	16%	1,892	1,704	189	11%	,
NET SALES	\$43,279	\$48,131	(\$4,852)	-10%	\$59,055	\$73,630	(\$14,575)	-20%	FY FCST G 13,235 vs. AOP 18,890
	l			- 1					FY FCST F 3,052 vs. AOP 2,842
STD. MATERIAL AND FREIGHT	(\$30,910)	(\$32,489)	\$1,579	-5%	(\$42,721)	(\$49,969)	\$7,248	-15%	·
STD. LABOR	(1,164)	(1,515)	351	-23%	(1,507)	(2,292)	785	-34%	Higher Freedomline mix.
STD. BURDEN	(4,808)	(6,315)	1,507	-24%	(6,189)	(9,563)	3,374	-35%	Lower G volume.
STD. COST OF SALES	(\$36,882)	(\$40,319)	\$3,437	-9%	(\$50,417)	(\$61,824)	\$11,407	-18%	
STD. MARGIN B/F PRICING	\$6,397	\$7,812	(\$1,415)	-18%	\$8,638	\$11,806	(\$3,168)	-27%	
STD. MARGINS B/F PRICING	14.8%	16.2%	(1.4)	1	14.6%	16.0%	(1.4)		
	i			1	1				
CIVILIAN SALES PRICING	(\$220)	(\$1,381)	\$1,161	-84%	(\$250)	(\$1,996)	\$1,746	-87%	Less Freightliner Pricing.
CE/PA	(4,258)	(4,069)	(189)	5%	(5,238)	(5,539)	301	-5%	
STANDARD GROSS MARGIN	\$1,919	\$2,362	(\$443)	-19%	\$3,150	\$4,271	(\$1,121)	-26%	
				1	İ				
MATERIAL VARIANCES	(\$854)	\$594	(\$1,448)	-244%	(\$1,053)	\$1,466	(\$2,519)	-172%	Morristown, Guardian, Leoni, Parker.
EXCHANGE	(710)	43	(\$763)	-1751%	(1,611)	146	(\$1,757)	-1203%	Exchange at .85 \$/E vs. 1.07.
DIRECT LABOR VARIANCE-OTHER	(\$563)	\$83	(\$646)	-778%	(\$671)	\$295	(\$966)	-327%	Slow adjustment to lower volumes. Freedom Launch.
BURDEN VARIANCE	(10)	1,432	(1,442)	-101%	(262)	2,969	(3,231)	-109%	Inability to Reduced Fixed Burden.
DEPRECIATION/IMPAIRMENT	(424)	(2,383)	1.959	82%	(5,975)	(3,257)	(2,718)	83%	Impaired depreciation. 5,400K 2003 impairment.
WARRANTY ACCURAL	(3,573)	(2,129)	(1,444)	68%	(4,255)	(3,286)	(969)	29%	Deficit. Rates \$206/U vs. \$176. Lower volumes.
TOTAL VARIANCES	(\$6,134)	(\$2,360)	(\$3,774)	160%	(\$13,827)	(\$1,667)	(\$12,160)	729%	
GROSS PROFIT	(4,215)	2		n/a	(10,677)	2,604		-510%	
				i					
GENERAL & ADMIN.	(\$3,445)	(008,6\$)	\$355	-9%	(\$4,610)	(\$4,992)	\$382		Lower spending.
ENGINEERING	(3,561)	(3,978)	417	-10%	(4,742)	(5,273)	531	-10%	Lower spending.
SALES & MKTG	(4,639)	(4,410)	(229)	5%	(6,193)	(6,372)	179	-3%	Spending timing. Lower spending.
TOTAL OPERATING EXPENSE	(\$11,645)	(\$12,188)	\$543	-4%	(\$15,545)	(\$16,637)	\$1,092	-7%	
ART ORFDATING PROFIT	(045 000)	(444444							'
NET OPERATING PROFIT	(\$15,860)	(\$12,186)	(\$3,674)	30%	(\$26,222)	(\$14,033)	(\$12,189)	87%	
OT IED IN IOON SEIGNOON IOC									
OTHER INCOME/EXPENSE	\$270	\$0	\$270	п/а	(\$137)	\$0	(\$137)		Interest on Earnout 536, Asset w/o.
INTEREST EXPENSE	(1,570)	(2,336)	766	-33%	(2,202)	(3,117)	915	-29%	2.57% vs. 4.0%
TRANSMISSION PBT	(\$17,160)	(\$14,522)	(\$2,638)		(\$28,561)	(\$17,150)	(\$11,411)	67%	
CLUTCHPBT	2,401	0	2,401	n/a	2,401	0	2,401	n/a	
COMBINED PBT	(\$14,759)	(\$14,522)	(\$237)	2%	(\$26,160)	(\$17,150)	(\$9,010)	53%	j

8



Debt



ZF Meritor Board Meeting July 15, 2003

### 2003 Cash Flow

Transmission PBT
Transmission Warranty Accrual
Depreciation/Impairment

Transmission Warranty Charges
Capital Spending

Working Capital Changes

Earnout

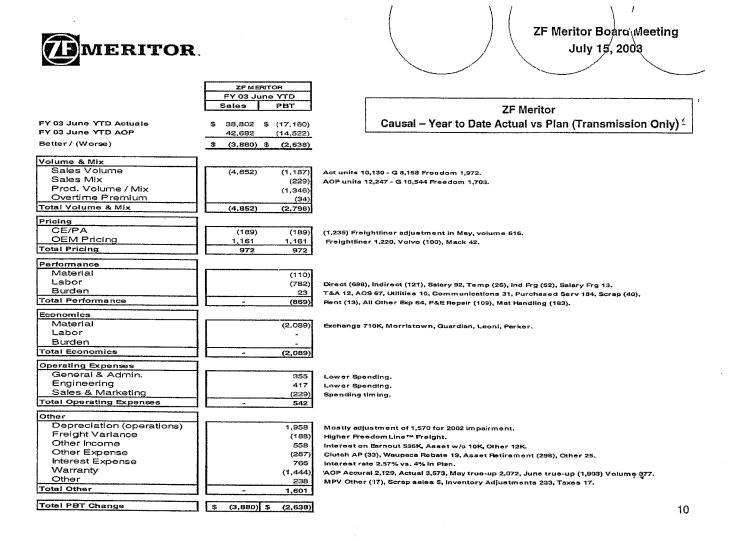
Transmissions Operating Cash Flow
Clutch Operating Cash Flow

Cash Balance Change

Combined Cash Required

	F'	Y 2003 F	ORECAS	Т
FY2002	JUNE	B/(W)	FY 2003	B/(W)
Balance	YTD	PLAN	FCST	PLAN
	(\$17.2)	(\$2.6)	(\$28.6)	(\$11.4)
ŀ	\$3.6	\$1.4	\$4.2	\$0.9
1	\$0.3	(\$2.6)	\$6.1	\$2.0
1	\$8.4	(\$4.0)	\$9.8	` '
	\$0.7	\$3.3	\$1.3	\$2.8
	\$1.7	\$1.9	\$0.5	\$2.7
	\$10.9	\$0.0	\$14.7	\$0.0
	(\$9.7)	(\$2.7)	(\$14.2)	(\$7.1)
	(\$1.5)	\$2.5	(\$3.6)	\$1.7
	(\$1.5)	(\$1.5)	\$0.2	\$0.2
	(\$12.7)	(\$1.7)	(\$17.6)	(\$5.1)
\$55.9	\$68.6	\$1.5	\$73.4	(\$1.8)

ended '02 3.2 DT FC9





ZF MERITOR FY 03 Full Year Sales FY 03 Full Year Forecast 53,568 \$ (28,561) FY 03 Full Year AOP **ZF Meritor** 66,095 (17,150) Better / (Worse) Causal - Full Year FY03 Forecast vs FY03 \$ (12,527) \$ (11,411) (Transmission Only) Volume & Mix Sales Volume (14.574)(2,856) Fat units 13,456 - G 10,411 Freedom 3,044. Sales Mix (312)AOP units 18,890 - G 16,048 Freedom 2,842, Prod. Volume / Mix (3,266)Overtime Premium (27 Total Volume & Mix (14,574) (6,461)Pricing CE/PA 301 Freightliner Adjustment (1,235), volume 1,585. OEM Pricing 1.746 1,746 Freightliner 1,661, Volvo/Mack 85. Total Pricing 2,047 2,047 Performance Material (376) Labor (1,033)Direct Labor (929), Ind (181), Temp Labor (2). ID Frg (73), Salary 125, Sal Frg 27. Burden (146)T&A (9), Utilities (9), Freight (4), Comm. 34, Purch Serv 197, Scrap (56), Rent (14), Total Performance (1,555) AOE 58, P&E Repair (128), Mat Handling (263), AOS 48. Economics Material (3.704)Exchange (1,528), Morristown, Guardian, Leoni, Parker. Labor Burden Total Economics (3,704)Operating Expense General & Admin. 382 Lower spending. Engineering 531 Lower spending. Sales & Marketing 179 Lower spending. Total Operating Expenses 1,092 Depreciation (operations) Freight Variance Depreciation 2,882 - mostly 2002 impairment impact. Year-end impairment (5,400). (2.718)(181) Higher Freedom freight. Other Income 558 Asset w/o 10, Other 10, Earnout Interest \$536K. Other Expense (287) Clutch AP (33), Waupaca Rebate 19, Asset Retirement (298), Other 25. Interest Expense Interest rate 2.57% vs. 4% in Plan. Warranty (969) May True up (2,072), June true-up \$1,903, volume \$960. Other (148)Forecast hold (409), MPV Other (23), Taxes 17, Scrap 5, Inv. Adj. 262. Total Other (2,831)Total PBT Change \$ (12,527) \$ (11,411)

11

Highly Confidential ZFMA0019980

ZF Meritor Boarcy Meeting

July 15, 2003





# ZF Meritor 2004 to 2008 Business Plan Assumptions

June 28, 2003

12





# NAFTA Class 8 Truck Build

	FY '03		FY	'04		FY '05			FY '06			FY '07				FY '08					
	165,500		222,	110		273,300			304,500			263,500				194,300					
ZFM - FY	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
Qtr. Split		21%	24%	27%	28%	23%	24%	26%	27%	26%	25%	25%	24%	28%	27%	24%	22%	28%	25%	24%	23%
Qtr. Units	44,020	47,000	53,500	60,000	61,610	62,859	65,592	71,058	73,791	77,952	77,343	74,907	74,298	72,463	69,828	63,240	57,970	54,404	48,575	46,632	44,689

#### OEM MARKET SHARE - Class 8 - NAFTA

	est to	DEM Marke	t Share F	'ércentage	e		OEM Market Share Volume					
	FY	FY	FY	FY	FY	FY	FΥ	FY	FY	FY		
	2004	2005	2006	2007	2008	2004	2005	2006	2007	2008		
Freightliner LLC					<del></del>			·	·			
Freightliner	29.6%	29.6%	29.6%	29.6%	29.6%	65,700	80,842	90,071	77,943	57,474		
Sterling	6.7%	6.7%	6.7%	6.7%	6.7%	14,800	18,212	20,291	17,559	12,947		
Western Star	1.7%	1.7%	1.7%	1.7%	1.7%	3,800	4,676	5,209	4,508	3,324		
Total	38.0%	38.0%	38.0%	38.0%	38.0%	84,300	103,729	115,571	100,010	73,745		
International	16.6%	16,6%	16.6%	16.6%	16.6%	36.820	45,306	50,478	43,681	32,210		
				101070	1010,0	00,020	10,000	00,470	1 40,001	02,210		
Paccar												
Kenworth	12.3%	12.3%	12.3%	12.3%	12.3%	27,300	33,592	37,427	32,387	23,882		
Peterbilt	10.9%	10.9%	10.9%	10.9%	10.9%	24,150	29,716	33,108	28,650	21,126		
Total	23.2%	23.2%	23.2%	23.2%	23.2%	51,450	63,308	70,535	61,038	45,008		
VTNA	٦											
Mack	11.9%	11.9%	11.9%	11.9%	11.9%	26,500	32,607	36,330	31,438	23,182		
Volvo	10.3%	10.3%	10.3%	10.3%	10.3%	22,850	28,116	31,326	27,108	19,989		
Total	22.2%	22.2%	22.2%	22.2%	22.2%	49,350	60,723	67,656	58,546	43,171		
Scania	0.1%	0.1%	0,1%	0.1%	0.1%	190	234	260	225	166		
						L						
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	222,110	273,300	304,500	263,500	194,300		

13





# ZFM Penetration & Product Mix by Major OEM's

	A-170	Product	Penetratio	n By OEM.	44
	FY	FY	FY	FY	FY
	2004	2005	2006	2007	2008
eightliner LLC		<del></del>			
Freightliner					
Model 2	8.0%	7.7%	5.8%	4.1%	3.5%
Freedom	1.5%	1.9%	3.8%	5.4%	6.1%
Total	9.6%	9.6%	9.6%	9,6%	9.6%
Sterling			·		0.070
Model 2	2.5%	2.3%	1.8%	1.5%	1.3%
Freedom	0.4%	0.7%	1.2%	1.5%	1.6%
Total	3.0%	3.0%	3.0%	3.0%	3,0%
Western Star					01070
Model 2	0.2%	0.2%	0.2%	0.2%	0,2%
Freedom	0.0%	0.0%	0.0%	0.0%	0.0%
Total	0.2%	0.2%	0.2%	0.2%	0.2%
Total	8.0%	8.0%	8.0%	8,0%	8.0%
ternational	_			·	
International	<del></del>				
Model 2	5.5%	4.5%	4.5%	4.5%	4.5%
Freedom	2.5%	3.5%	3.5%	3.5%	3.5%
Total	8.0%	8.0%	8.0%	8.0%	8.0%
ıccar					
Kenworth			· · · · · · · · · · · · · · · · · · ·	·····	
Model 2	1.1%	0.8%	0.5%	0.2%	0.2%
Freedom	1.4%	1.8%	2.0%	2.2%	2.2%
Total	2.5%	2.5%	2.5%	2.5%	2.5%
Peterbilt			1 2.576	2.3/0	2.5%
Model 2	1.6%	1.1%	0.7%	0.3%	0.3%
Freedom	1.9%	2.4%	2.8%	3.1%	3.1%
Total	3.5%	3.5%	3.5%	3.5%	3.5%
Total	3.0%	3.0%	3.0%	3.0%	3.0%

2007	2000	2006	2007 2008				
<del></del>							
5,278	6,198	5,196	3,231	1,996			
1,014	1,544	3,431	4,234	3,508			
6,292	7,742	8,627	7,465	5,504			
				*			
377	420	365	263	175			
67	126	243	263	214			
444	546	609	527	388			
				·			
8	9	11	9	7			
0	0	0	0	0			
8	9	11	9	7			
6,744	8,297	9,247	8,001	5,900			

2,025	2,038	2,272	1,966	1,450
921	1,585	1,767	1,529	1,127
2,946	3,624	4,040	3,494	2,577

1,526	1,879	2,094	1,812	1,336	
845	1,040	1,159	1,002	739	
465	707	927	902	665	
380	333	232	100	74	
681	840	935	809	597	
374	588	748	728	537	
307	252	187	81	60	

14





## ZFM Penetration & Product Mix by Major OEM's - cont.

VTNA					
Mack				***************************************	
Model 2	2.1%	2.1%	2.1%	2.1%	2.1%
Freedom	0.9%	0.9%	0.9%	0.9%	0.9%
Total	3.0%	3.0%	3.0%	3.0%	3.0%
Volvo		•		L	
Model 2	12.9%	12.6%	9.7%	5.8%	5.8%
Freedom	4.6%	4.9%	7.8%	11.7%	11.7%
Total	17.5%	7.5% 17.5% 17.5%		17.5%	17.5%
Total	9.7%	9.7%	9.7%	9.7%	9.7%
Scania					
Scania					
Model 2	0.0%	0.0%	0.0%	0.0%	0.0%
Freedom	0.0%	0.0%	0.0%	0.0%	0.0%
Total	0.0%	0.0%	0.0%	0.0%	0.0%
Total Model 2	5.3%	4.9%	4.0%	3.0%	2.8%
Total FreedomLine	1.9%	2.3%	3.3%	4.2%	4.4%
TOTAL	7.2%	7.2%	7.2%	7.2%	7.2%

560	686	768	664	490
240	294	329	285	210
800	980	1,097	949	700
2,939	3.549	3,031	1,577	1,154
1,060	1,371	2,452	3,167	2,344
	4,920	5,483	4,744	3,498
3,999				

0	0	0	0	0	
0	0	0	0	0	
0	0 0		0 0		
11,875	13,485	12,062	7,892	5,405	
4,140	6,215	9,898	11,108	8,605	
16,015	19,700	21,960	19,000	14,010	

15



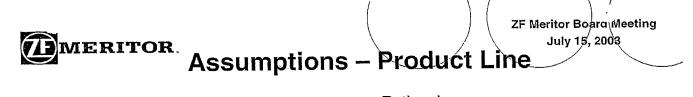
ZF Meritor Board Meeting July 15, 2003

## Assumptions - Pricing and CE/PA

- 1. CE/PA \$235 per unit for 10-speed manuals \$500 per unit for FreedomLine®
- 2. Pricing Volvo 2% reduction in 2004 and 2005 for G Platform. No other pricing.
- 3. Data Book Positions:

Product	Freightliner LLC	Volvo Truck Group	PACCAR	International
10-Speed Manuals	Not listed in the Data Book  \$200 Penalty list as special order	Listed in the Data Book     \$200 List Penalty	Listed in the Data Book  \$50 to \$250 List Penalty	Listed on 9000     Series only     Not offered on new models     \$585 List Price Penalty
FreedomLine®	<ul> <li>Not listed in the Data Book</li> <li>Approx. \$450- 500 penalty to AutoShift as special order</li> </ul>	Listed in the Data Book     \$596 list penalty to AutoShift	Listed in the Data Book \$1,853 list penalty to AutoShift	Listed in     Data Book     \$2,157 list     penalty to     AutoShift

16



Product	Assumption	Rationale		
9-Speeds	Drop as of 1-1-04	Low Volume (2%); Negative Margin at International; Eaton and OEMs dropping		
13-Speeds	Drop as of 1-1-04	Derivative of 9-Speed     Poor design and warranty problem		
10-Speeds	Drop SureShift 11-1-03     Maintain all other     10-Speed derivatives     10L Release in 2005	<ul> <li>Low Volume; Wabco Price Increase</li> <li>Majority of Volume</li> <li>Testing in 2003 and 2004</li> </ul>		
12-Speed FreedomLine®	<ul> <li>Industrialize the Overdrive by 2005</li> <li>Purchase the Direct Drive complete from ZFF</li> </ul>	<ul><li>Direct Drive (1.5%)</li><li>Overdrive (96.5%)</li></ul>		
16-Speed FreedomLine®	Purchase complete from ZFF (overdrive only)	Low volume (2.0%)     of the FreedomLine®		





## **Assumption – Warranty Accrual Rates**

FY04 AOF	Total Cos	t per Unit	Sold - C	Original								
	FY97	FY98	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08
1	\$63.59	\$66.24	\$43.26	\$123.52	\$153.93	\$62.77	\$41.55	\$42.80	\$44.08	\$45.41	\$46.77	\$48.17
2	\$75.84	\$90.98	\$39.64	\$153.58	\$135.59	\$69.18	\$38.72	\$39.88	\$41.08	\$42.31	\$43,58	\$44.89
3	\$90.03	\$98.84	\$51.06	\$125.64	\$143.65	\$72.11	\$42.99	\$44,28	\$45.61	\$46.98	\$48.39	\$49.84
4	\$85.25	\$106.96	\$51.75	\$80.27	\$103.16	\$73.73	\$57.20	\$58.91	\$60.68	\$62.50	\$64.38	\$66.31
5	\$87.41	\$106.32	\$57.24	\$87.27	\$114.01	\$86.05	\$67.26	\$69.28	\$71.36	\$73.50	\$75.70	\$77.97
Total	\$402.12	\$469.34	\$242.96	\$570.29	\$650.34	\$363.85	\$247.73	\$255.16		\$270.70	\$278.82	\$287,19

OnTrac		FY00	FY 01	FY02	FY03	FY04	FY05	FY06	FY07	FY08
30% reduction to CPC	1 1	1	1	1	1	0.85	0.82	0.79	0.76	0.73
50% of claims in fy04	2	1	1	1	0.85	0.82	0.79	0.76	0.73	0.73
60% of claims in fy05	3	1	1	0.85	0,82	0.79	0.76	0.73	0.73	0.73
70% of claims in fy06	4	1_1_	0.85	0.82	0.79	0.76	0.73	0.73	0.73	0.73
80% of claims in fy07	5	0,85	0.82	0.79	0.76	0.73	0.73	0.73	0.73	0.73

Ur Produced

FY04 AOP Total Cost per Unit Sold - With OnTrac Assumption												***
4.	FY97	FY9B	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08
1 1	\$63.59	\$66.24	\$43.26	\$123.52	\$153.93	\$62.77	\$41.55	\$36.38	\$36.15	\$35.87	\$35.54	\$35.17
2	\$75.84	\$90.98	\$39.64	\$153.58	\$135.59	\$69,18	\$32.91	\$32.70	\$32,45	\$32.16	\$31.81	\$32.77
3	\$90.03	\$98.84	\$51.06	\$125.64	\$143.65	\$61.30	\$35.26	\$34.98	\$34.67	\$34.30	\$35,33	\$36.39
4	\$85.25	\$106.96	\$51.75	\$80.27	\$87.68	\$60.46	\$45.19	\$44.77	\$44.30	\$45,63	\$46,99	\$48.40
5	\$87.41	\$106.32	\$57.24	\$74.18	\$93.49	\$67.98	\$51.12	\$50.57	\$52.09	\$53,65	\$55,26	\$56.92
Total	\$402,12	\$469,34	\$242.96	\$557.20	\$614.34	\$321.69	\$206.03	\$199.42	\$199.66	\$201.61	\$204.94	\$209.65

- Warranty Rates Adjusted for OnTrac Cost Improvements
- Further Engineering Improvements Not Estimated. Rate based on Current Data
- FreedomLine® rate held the same as "G" Platform due to lack of data
- Based on Latest Rates From M. Veillette, Dated 6-26-03

\* per 040, their apprience is \$600 lat. on A strenic

18





# Assumptions – Warranty Cash Flow

	<u>2004</u>	<u>2005</u>	<u>2006</u>	2007	<u>2008</u>
"G" Platform (\$000)	\$6,594	\$5,357	\$3,758	\$2,740	\$2,042
FreedomLine® (\$000)	130	281	524	874	1,138
Sub Total (\$000)	\$6,724	\$5,638	\$4,282	\$3,614	\$3,180
Clutch (\$000)	\$2,091	\$812	\$229	<u>\$63</u>	\$5
TOTAL (\$000)	\$8,815	\$6,450	\$4,511	\$3,677	\$3,185

Based on Cash Flow Estimates from M. Veillette Dated 6-26-03

19





### **Assumptions - Operations**

- 1. Housing Machining will be outsourced effective January 1, 2004:
  - The back half of the building will be shutdown.
  - Honing and housing sub-assembly will be moved to the front building.
- 2. Labor and Burden Reductions Due to Outsourcing Machining are:
  - Labor Production and Production Support 11 Technicians
    - Maintenance 4 Technicians
    - Savings \$728 thousand annually
  - Burden (\$000):

		<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>
•	Utilities	133	178	178	178	178
•	Scrap	52	77	77	77	77
•	T&A	134	175	175	175	175
	Repairs	<u>362</u>	<u>430</u>	<u>430</u>	<u>430</u>	<u>430</u>
•	Total	\$681	\$860	\$860	\$860	\$860

### 3. Communication Cost Reduction:

- > Shared Office Equipment = 48.5% (\$132,077) over 5 years
- Voice/Data Equipment and services = 18% (\$138,500) over 5 years

20



ZF Meritor Board Meeting July 15, 2003

**Assumptions - Operations** 

- 4. Tremec Contract
  - All gearing resourced by October, 2003
  - Testing of 1,850 ft-lb torque to continue until May 2004.
- 5. "G" Platform Material Performance With The Decrease in Volumes, Cost Reduction Is Minimal.

	<u>2004</u>	<u>2005</u>	<u>2006</u>	2007	2008
MPV (\$000)	\$(106)	\$93	\$304	<del>\$181</del>	\$120
MPV (%)	-0.4%	0.3%	1 0%	i n%	1.09/

6. Inventory Turns:

•	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>
Gross Inventory (\$000)	\$6,454	\$8,484	\$10,654	\$8,441	\$7,094
In-Transit Inv. (\$000)	657	1,055	\$1,754	\$1,353	\$1,043
Gross Inv. Turns Inv. Turns Less In-Transit	10.4 11.6	9.7 10.9	8.2 9.7	8.8 10.3	9.5 11 <b>.</b> 2

21



ZF Meritor Boaro Meeting July 15, 2003

## Assumption – FreedomLine® Industrialization

12 Speed Freedom Cost Model												
	2001 2002 2003 2					2005	2006	2007	2008			
	CBU	CBU	CBU	CKD	CKD	CKD	CKD	CKD	CKD			
Volumes					4,060	6,091	9,699	10,886	8,433			
Actuator & Shift Module *	\$1,120	\$1,110	\$1,101	\$1,066	\$1,066	\$1,066	\$670	\$670	\$670			
Gears	881	916	907	881	881	349	0	0	0			
Housing	280	330	355	353	353	353	353	353	353			
Machining Labor and Burden	278	275	165	158	158	0	0	0	0			
Planetary	512	516	541	531	531	531	ō	Ö	. 0			
Other Parts	675	722	678	666	666	666	438	222	0			
Pinning Assembly and Burden	54	55	58	55 <sup>-</sup>	55	55	0	0	0			
Other Assembly and Burden	574	363	352	0	0	0	0	0	0			
Subtotal ZFF Purchases	\$4,374	\$4,287	\$4,157	\$3,710	\$3,710	\$3,020	\$1,461	\$1,245	\$1,023			
Brazil Gears						\$504	\$717	\$717	\$717			
Machining Outsourced						117	117	117	117			
Planetary							433	433	433			
Other Parts					ļ.		101	317	539			
Add-Ons *	786	786	776	776	806	800	699	699	699			
Subtotal Other Material	\$786	\$786	\$776	\$776	\$806	\$1,421	\$2,067	\$2,283	\$2,505			
Subtotal Combined Material	\$5,160	\$5,073	\$4,933	\$4,486	\$4,516	\$4,441	\$3,528	\$3,528	\$3,528			
Freight	\$283	\$194	\$194	\$203	\$203	\$203	\$203	\$203	\$203			
Packing	57	57	57	100	100	Ψ <u>2</u> 03	39	ş203 34	₽203 28			
In-House Assembly Labor and Burden				171	120	115	106	106	109			
Total	\$5,500	\$5,324	\$5,184	\$4,960	\$4,939	\$4,840	\$3,876	\$3,871	\$3,868			

CKD for 12-Speed; CBU for 16-speed

GS4 Cost Reduction of \$380 per unit 05 thru 08 based on Engineering cost of \$1.5 million in 2004.

Euro = \$1.00 (Exchange in Material Variances) \*

Covereprent w/ wabco





### **Assumptions - Economics**

- 1. Exchange Rate: 1Euro = \$\pm \frac{4}{1.18}
- 2. Employee Costs:
  - > 401K Plan Reinstated in FY 2003
  - > Technician Wage Increase = 3% in February 2004, 2006, 2008
  - Professional Wage Increase = 5% in February 2004 and 4% in February 2005 through 2008
- 3. Interest Rate = 2.57%
- 4. Utilities Price Increase of 2.8% annually
- 5. Insurance Rate Increase from \$436K in 2003 to \$636K in 2004
- 6. Accounts Receivable = 42 days
- 7. Accounts Payable = 52 days
- 8. Workman's Compensation Costs Estimated at \$250,000 Annually

23





### **Assumptions - Other**

- Impairment:
- \$2.356M Land and Building at appraised value
  - All Equipment and Machinery Written Down to 10% of Book Value or Salvage Value
  - All Asset Purchases (Capital Plan) will be expensed at 90% and capitalized at 10%
- ArvinMeritor Services Contract All Items Held Constant Throughout The Planning Period at 2003 Rate Except IT Services, Which Were Held Constant Until ERP Was Implemented.
- Engineering Budget \$1.5 Million Added In 2004 To Pay ZF for Engineering The Voltage Doubler and ZMTEC Into The GPS4. Cost Reduction of \$380 Per Unit from 2005 to 2008.
- ERP \$1.4 Million Capital and \$0.4 Million Operating Expense Was Added to 2004 for Implementation of SAP. This Was Originally Expected To Be Approved And Implemented In 2003.

24





# **Executive Summary**

		FY 2003	FORECAST	FY 2004 PLAN									
	JUNE	B/(W)	FY 2003	B/(W)		B/(W)		B/(W)		B/(W)		B/(W)	
	YTD	PLAN	FCST	PLAN	2004	PRIOR	2005	PRIOR	2006	PRIOR	2007	PRIOR	2008
Units	10,130	(2,117)	13,455	(5,435)	16,015	(15,424)	19,700	(25,027)	21,960	(29,229)	19,000	(31,333)	
Sales	\$38.8	(\$3.9)	\$53.6	(\$12.5)	\$65.6	(\$41.7)	\$81.1	(\$82.6)	\$97.0	(\$119.5)	\$91.8	(\$135.4)	\$71.0
Combined PBT	(\$14.8)	(\$0.2)	(\$26.2)	(\$9.0)	(\$22.1)	(\$8.9)	(\$17.7)	. ,		(\$19.0)		(\$20.5)	,
Cash Requirement Trans.	\$10.9	(\$3.9)	\$14.1	(\$6.9)	\$22.7	(\$12.3)	\$21.0	(\$14.6)	\$11.3°	(\$22.1)	\$6.9	(\$22.9)	\$10.9
Cash Requirement Clutch	1.8	2.2	3.5	1.8	2.1	1.5	0.8	1.1	0.2	0.6	0.1	0.3	0.0
Total Cash Required	\$12.7	(\$1.7)	\$17.6	(\$5.1)	\$24.8	(\$10.8)	\$21.8	(\$13.5)		(\$21.5)		(\$22.7)	
Ending Debt	\$68.6	\$1.5	<b>*\$7</b> 3.4	· (\$1.8)	\$98.2	(\$12.7)	\$120.0	(\$26.1)	\$131.4	(\$47.5)	\$138.3	(\$70.2)	\$149.3
A/R Days Average	42.6	(6.3)	42.0	(4.0)	42.0	(10.9)	42.0	(13.0)	42.0	(13.0)	42.0	(13.0)	42.0
A/P Days Average	54.3	15.8	51.5	10.5	52.0	17,1	52.0	22.2	52.0	24.2	52.0	27.8	52.0
Gross Inv. Turns Ending	8.0	(4.6)		(2.6)	10.4	(4.0)		(5.5)	8.2	(7.1)	8.8	(6.4)	9,5
Gross Inv. Turns Average	7.5	(3.6)	7.8	(3.7)	11.4	(3.5)	10.3	(6.9)	8.7	(6.9)	9.4	(6.9)	10.3
Net Inv. Turns Ending	8.7	(4.6)		(2.2)	10.0	(4.0)	9.7	(5.8)	8.2	(7.4)	8.8	(8.2)	9.5
Net Inv. Turns Average	8.2	(3.6)	8.5	(3.7)	11.0	(3.6)	10.3	(6.1)	8.7	(7.3)	9.4	(7.5)	
Capital Plan (90% expense/10% capital)	\$0.7	\$3.2	\$1.3	\$2.8	\$4.7	(\$0.6)	\$2.9	\$2.8	\$3.1	\$1.7	\$1.2	\$1.7	\$1.0
Headcount w/> \\psi \rightarrow \rightarr	154	3	151 355	14	137 479	36	148 548	38	148	48	140	53	128
			- 223		1 7/3		548		655		655		555

25





# 2003 - 2008 Cash Flow

		FY 2003 FORECAST			FY 2004 PLAN									
	FY2002	JUNE		FY 2003	' ' ' '		B/(W)		B/(W)		B/(W)		B/(W)	
Transmission PBT	Balance		PLAN		PLAN	2004	PRIOR		PRIOR		PRIOR	2007	PRIOR	2008
Transmission Warranty Accrual		(\$17.2)			(\$11.4)	1, ,	• • •		, ,		(\$19.0)	(\$9.0)	(\$20.5)	(\$12.6)
Depreciation/Impairment		\$3.6	\$1.4		\$0.9	\$3.2	(\$1.5)	i '	(\$3.3)		(\$4.4)	1	(\$4.9)	
- production in partition		\$0.3	(\$2.6)	\$6.1	\$2.0	\$4.7	\$0.8	\$3.1	\$0.4	\$3.5	(\$0.6)	\$1.6	(\$2.1)	\$1.3
Transmission Warranty Charges		\$8.4	(\$4.0)	\$9.8	(\$4.0)	\$6.7	(\$2.1)	\$5.6	(\$0.9)	\$4.3	\$0.9	\$3.6	\$2.5	\$3.2
Capital Spending		\$0.7	\$3.3	\$1.3	\$2.8	\$4.7	(\$0.6)		\$2.8	\$3.1	\$1.7	\$1.2	\$1.7	\$1.0
W II					]		Ì	,	•	, , , ,	T ***	, <u>.</u>	ΨΠ	Ψ
Working Capital Changes		\$1.7	\$1.9	\$0.5	\$2.7	(\$0.8)	\$0.1	(\$1.9)	\$1.4	(\$2.8)	(\$0.7)	\$1.3	\$0.3	\$1.5
Earnout		\$10.9	\$0.0	\$14.7	\$0.0	\$3.8	(¢0.0)		<b>\$0.0</b>		40.0			
	1	410.0	ψυ.υ	ΨΙΤΩ	φυ.υ	φο.ο	(\$0.0)		\$0.0		\$0.0		\$0.0	
Transmissions Operating Cash Flow		(\$9.7)	(\$2.7)	(\$14.2)	(\$7.1)	(\$22.7)	(\$12.3)	(\$21.0)	(\$14.6)	(\$11.3)	(\$22.1)	(\$6.9)	(\$22.9)	(\$10.9)
Clutch Operating Cash Flow		(\$1.5)	\$2.5	(\$3.6)	\$1.7	(\$2.1)	64 5	(èn n)	د. دري	(00.0)	40.0			
		(41.0)	ΨΔιο	(φυ.υ)	Ψ1,1	(φε. 1)	\$1.5	(\$0.8)	\$1.1	(\$0.2)	\$0.6	(\$0.1)	\$0.2	
Cash Balance Change		(\$1.5)	(\$1.5)	\$0.2	\$0.2									
Combined Cody B												<u></u>		
Combined Cash Required		(\$12.7)	(\$1.7)	(\$17.6)	(\$5.1)	(\$24.8)	(\$10.8)	(\$21.8)	(\$13.5)	(\$11.5)	(\$21.5)	(\$7.0)	(\$22.7)	(\$10.9)
Debt	\$55.9	\$68.6	\$1.5	\$73.4	(61 0)	eno n	(640 m)	<b>#</b> 400 C	(000 4)	<b>.</b>	445	<b>.</b>		
l	ψυυ.υ	φυσ.0	\$1.0	φ/ 3.4	(\$1.8)	\$98.2	(\$12.7)	\$120.0	(\$26.1)	\$131.4	(\$47.5)	\$138.3	(\$70.2)	\$149.3



ZF Meritor Board Meeting July 15, 2003

**Old Business** 

1. Meeting Schedule:

conflict of ARM L'AMP Mts - 12/1 A:-M? December 2, 2003 - ArvinMeritor Headquarters, Troy, MI

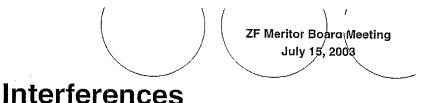
2. Eaton Interference on the ZF Meritor Patent for **Predicting Torque:** 

Eaton Lost This Interference Claim in hound one - printy pront is not

- Eaton Has Requested Discussion on Paying A Royalty For Use of This Patent.
- 3. FreedomLine® Sales and Warranty Update
- 4. "G" Platform Warranty Update

27





## Background:

Eaton has filed Interferences against ZFM Patents.

Two of the Interferences that were granted (104.835 and 104.834) against Patent 5,573,477 have had a favorable ruling by the Patent and Trademark Office.

Next step is discovery for a priority phase

Request for Interference (directed at Patents 5,571,059, 5,569,115, 5,573,588) have been filed. The Patent and Trademark Office maintains secrecy until the Interference is granted.

28



ZF Meritor Board Meeting July 15, 2003

Joes

# Interference

Status

Redacted

Redacted

> Eaton has indicated that they would be willing to conceue priority in all of the Interferences in exchange for a license.

, Redacted

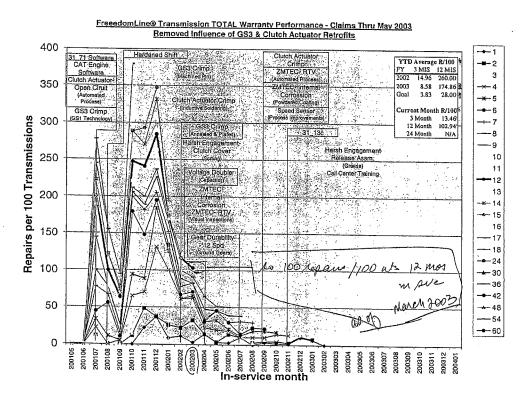
Discussions are in process to negotiate an Agreement with Eaton that will be presented to the BOD for approval.

Redacted





# Freedom Transmission Total Warranty Performance Claims Thru May 2003



30





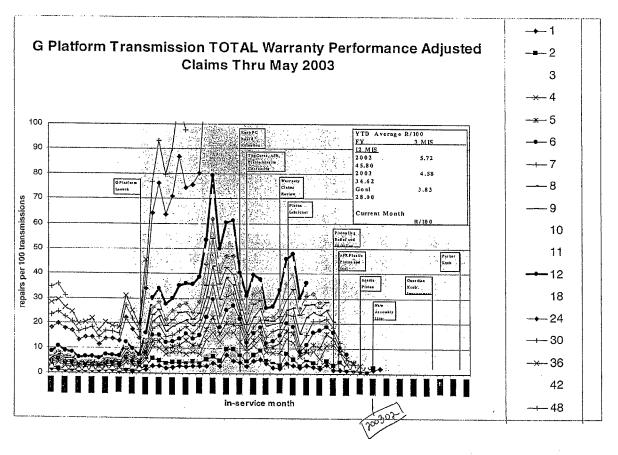
# Current FreedomLine® Performance Issues Top 6 from Engineering Field Test &/or Production

	TOP ISSUES		Technical Pr	Failure Severity	T	
	Symptom Root Cause	Frequent Coccasional Stabilized	No c. a. and/or devel. not started and/or not enough evidence to support c. a.  Final c. a. identified, devel. in process	Documentation complete AND 3 mos positive field experience	LS Trans will not move when started  L Trans fails when moving  F Fault Code, no influence on performence  K Comfort problem	Issue #
	1. Multiple Symptoms GS3	8	8	3/03 (König)	LS	126 390
in	2. Harsh Engagement / Shift Clutch Act. Crimp	8	[3]	3/31/03 (Schuh)	L (worst case)	332
top wine	Clutch Cover	⊠. 	8	9/31/03 (Kramer)	K	352
	Clutch Linkage	181	<u> 8 </u>	Open (Kramer) Int. Soln, in place Lo. Term: task force	K	355
	3. 0 Voltage  Doubler Capacitor	8	[8]	8/03 (Huber)	LS	356
	4. Multiple Symptoms ZMTEC			8/03 (Huber)	LS (worst case)	357 375 376 378
	5. No Symptom C/S Bearing Cups	8	[3]	11/03 (Dreier)		380 177
	6. No Air Pressure Floating Valves	<b>3</b>	[8]	12/03 (Dreier) PAK 6		403

31







Highly Confidential ZFMA0020001



ZF Meritor Board Meeting July 15, 2003

# "G" Platform Issues

<u>Subassembly</u>	Corrective Act Status	ion 	
Top Cover Air Filter Regulator Range Piston Synchronizer	Launched Launched Launched Pending	5-23-02 6-21-02 9-30-02	Similar Friction Material
Shift Knob			shows debond in service
Guardian	In Process	9-03	Change in Process to address switch stability and overmold
Parker	In Process	12-03	Re-launch Parker shift knob Follow-up Program with a new design scheduled for future launch
Neutral Switch Output Shaft Seal	Investigating Investigating	Ongoing Ongoing	rataro laurion

33





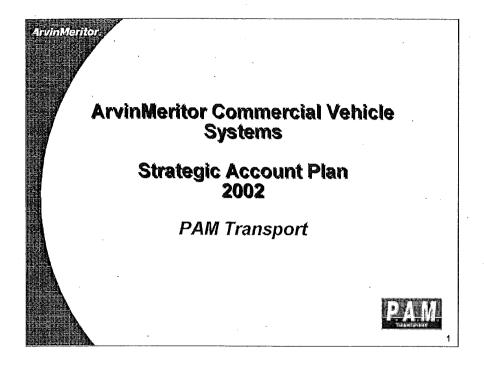
# **New Business**

- 1. Decisions Required Immediately:

  - > Approval of ZF Supply Contract \*but w/b omended for new agreement
    > Write-Off of Remaining "Impaired" Assets in FY 2003 -defer to Result
  - > Approval to Raise the Debt Ceiling in FY 2003 from \$71.6M to \$73.4M
- 2. Decisions Required to Implement the 2004-2008 Business Plan:
  - Immediate:
    - \$1.5 Million Design Fee for ZF for GPS4 July
    - Approval to Raise Debt Ceiling in FY 2004 to \$98.2M
    - ERP Implementation Jefan
    - Outsourcing of "G" Housing Machining -
  - At Next Board of Director's Meeting:
    - Resourcing of FreedomLine® Gears to ZF Brazil or Tremec

34

# EXHIBIT 11



Good morning ladies and gentlemen!

I am Silvio Angori and I have the pleasure of leading the ArvinMeritor Commercial Vehicle Exhaust team in Europe.

Our responsibility is to penetrate the CV exhaust market offering aftertreatment & exhaust modules.



Confidential ZFMA0038858

Arvinik	leritor.	Main Contac	ts
7	Contact Name	Title	Phone
	Bob Weaver	President	479-361-5470
	Larry Goddard	CFO	
	Cliff Lawson	<b>VP</b> Operations	
	Clark Gray	Dir of Safety	
	Carl Tapp	Dir of Maint	479-361-5251
			•
			PAM

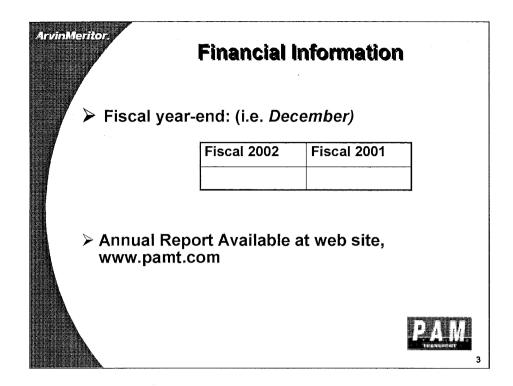
About two year ago we started within our division to gather market information on CV exhaust and aftretreatment systems. The drivers were the anticipated emission legislations changes. The merger with Meritor accelerated this process and 10 months ago we created two teams, one in US and another in UE with the main mission of gaining business on:

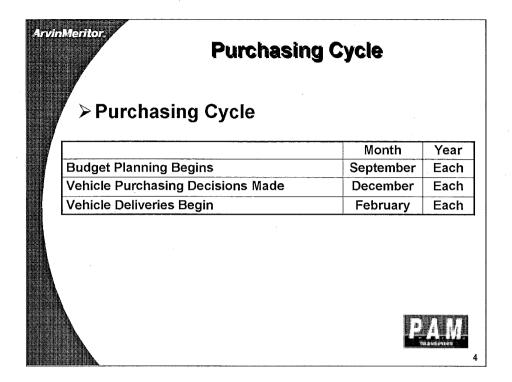
- OE market
- Retrofit markets, in use vehicles;
- Lifestyle vehicles

Offering to all of them competitive products and system solutions.

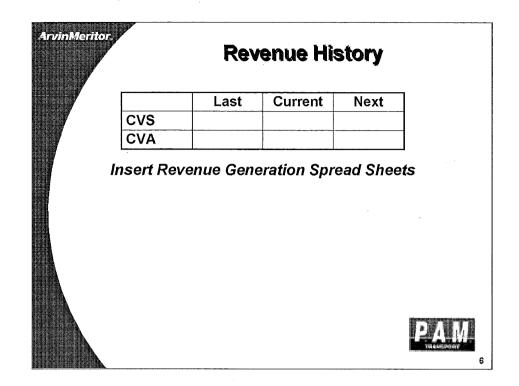
Today, Bob and I will take you through this challenging business adventure reviewing with you:

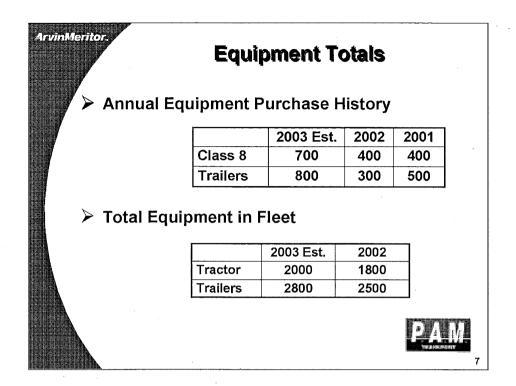
- •What are the Market drivers and our opportunities;
- Our business Strategy
- •Its implementation and the successes we have had.

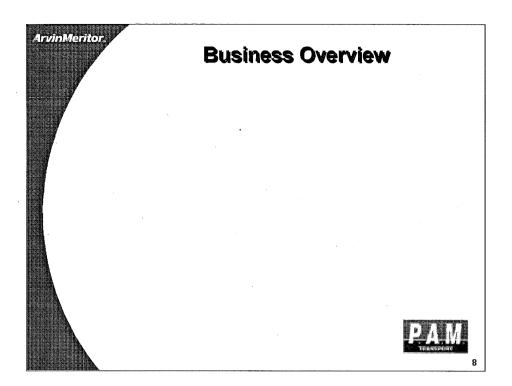


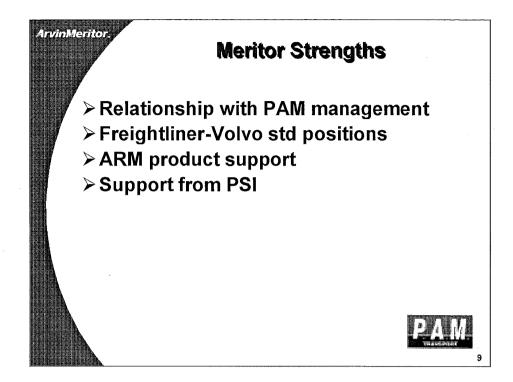


ArvinMeritor.	Product Listing
Product Name	Product Manufacturer
Front Axle	ARM
Rear Axle	ARM
Trans	ARM
Brakes	ARM
ASA	ARM
ABS	ARM
Suspension	Hendrickson
Brakes	ARM
Tire Inflation	MTIS
	Part of the second seco









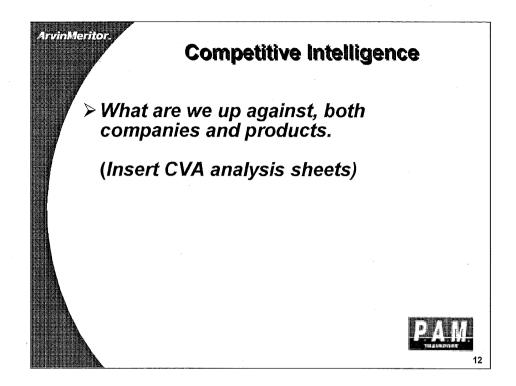
# Meritor Weakness > ESS product problems > RHP product problems > Eaton CE-product support > Tapp-Eaton long time relationship > Tapp-Sergeant relationship > Freightliner-Eaton trans status

## ArvinMeritor.

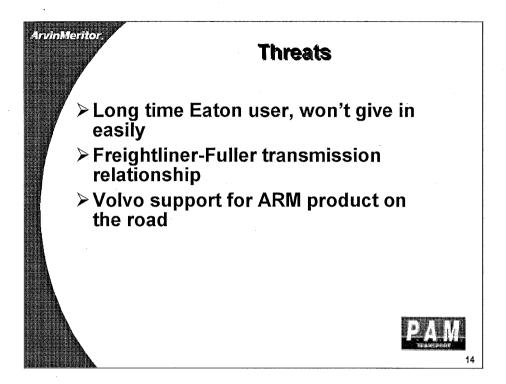
# Obstacles to doing business with PAM Transport

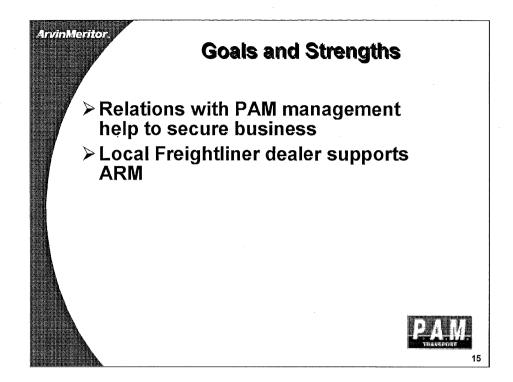
- > Freightliner pricing of Freedom
- > Freightliner push for Fuller trans
- > Tapp relationship with Sergeant
- ➤ Tapp relationship with Eaton
- > Weaver price buyer-not features

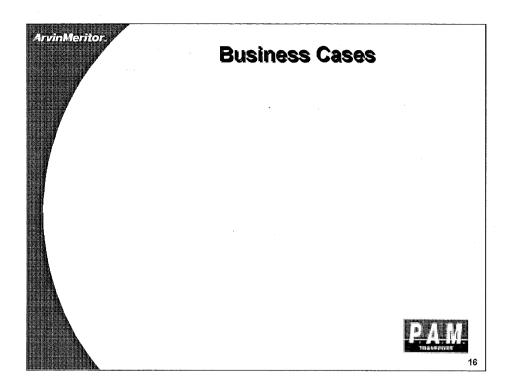




# PAM AutoShift user-likes technology in the transmission product line PAM successful fleet and buys new vehicles every year Very visible in NW Ark due to success and fleets copy specs





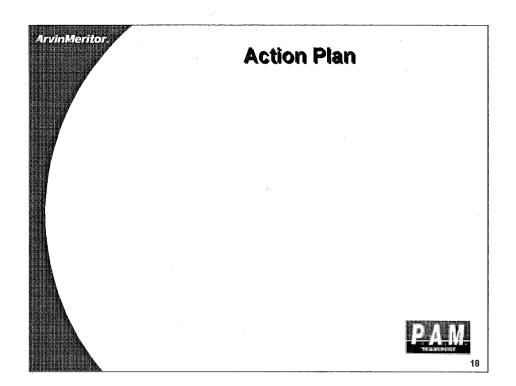


# ArvinMeritor.

# **Action Plan**

- Key Element Freedom trans specs @Volvo
- Timing 2003 Volvo purchase
- > Responsibility
- Swisher
- Completion Date
- November 02
- > Strategic Long Term Agreement Secure Freedom order-replace AutoShift





# EXHIBIT 12

```
1
                   IN THE UNITED STATES DISTRICT COURT
                   IN AND FOR THE DISTRICT OF DELAWARE
 3
 4
       ZF MERITOR LLC and MERITOR :
                                        CIVIL ACTION
       TRANSMISSION CORPORATION,
 5
 6
                       Plaintiffs,
 7
            vs.
       EATON CORPORATION,
                       Defendant. : NO. 06-623 (SLR)
10
11
                                 Wilmington, Delaware
12
                                 Tuesday, July 22, 2009
                                 1:56 o'clock, p.m.
13
14
      BEFORE: HONORABLE SUE L. ROBINSON, U.S.D.C.J.
15
16
      APPEARANCES:
17
18
                  DRINKER, BIDDLE & REATH LLP
                  BY: KAREN V. SULLIVAN, ESQ.
19
20
                             -and-
21
22
23
24
                                      Valerie J. Gunning
                                      Official Court Reporter
25
```

1 of 50 sheets

١.		i i	
	2		4
1	APPEARANCES (Continued):		DeRamus - direct
2	DICKSTEIN SHAPIRO LLP	1	THE COURT: Good. Why don't we put the good
3	BY: JAY FASTOW, ESQ.,	2	doctor on the stand, then.
4	PAUL R. TASKIER, ESQ., JENNIFER HACKETT, ESQ.,	3	MR. TASKIER: Your Honor, I also prepared a few
5	BRUCE HOLCOLMB, ESQ. and CHRISTOPHER WOOD, ESQ.	4	boards and slides, which might be useful for following his
	(Washington, D.C.)	5	testimony.
6		6	THE COURT: All right. Let me swear him in and
7	Counsel for Plaintiffs	7	then you can hand that up.
8		8	PLAINTIFFS' EVIDENCE
9	MORRIS, NICHOLS, ARSHT & TUNNELL	9	DAVID W. DeRAMUS, having been duly
10	BY: DONALD E. REID, ESQ.	10	sworn as a witness, was examined and testified as
11	-and-	11	follows
		12	MR. TASKIER: Your Honor, may I approach.
12	HOWREY LLP	13	THE COURT: Do you want to hand those up?
13	BY: JOSEPH A. OSTOYICH, ESQ., ANDREW LAZEROW, ESQ. and	14	MR. TASKIER: We'll also be having some larger
14	MELISSA HANDRIGAN, ESQ.	15	versions.
15	(Washington, D.C.)	16	THE COURT: All right.
16	Counsel for Defendant	17	(Mr. Taskier handed documents to the Court.)
17		18	DIRECT EXAMINATION
		19	BY MR. TASKIER:
18		20	Q. Dr. DeRamus, you prepared an expert report in this
19		21	case; is that correct?
20 21		22	A. I did.
22		23	Q. What were you asked to do in that report?
23 24		24	A. I was asked to review the information provided in this
25		25	case and to conduct my own research in order to assess
	3		5
1	PROCEEDINGS		DeRamus - direct
2	PROCEEDINGS	1 2	whether, from an economic perspective, the conduct by Eaton was anticompetitive. I was asked to define relevant markets
3	(Proceedings commenced in the courtroom,	3	for antitrust purposes, and I was asked to define relevant markets
4	beginning at 1:56 P p.m.)	4	- 1
5	beginning at 1.50 + p.iii.)	5	if any, suffered bay ZF Meritor as a consequence of Eaton's conduct.
6	THE COURT: All right. Have you all discussed	6	Q. Did you do an economic analysis to determine any
7	how this should probably proceed at this point?	7	market definition?
8	MR. TASKIER: No, your Honor. Paul Taskier, for	8	A. Yes, I did.
_	The monte of four flowers and resident for	9	
9	Plaintiff ZF Meritor and Meritor Transmission.	1 9	U. And did voll determine also whether there was
9 10	Plaintiff ZF Meritor and Meritor Transmission.  I think at the last hearing, your Honor		Q. And did you determine also whether there was monopolization in this case?
	Plaintiff ZF Meritor and Meritor Transmission.  I think at the last hearing, your Honor indicated that you wanted us to bring Dr. DeRamus for	10	monopolization in this case?
10	I think at the last hearing, your Honor		monopolization in this case?  A. Yes, I did.
10 11	I think at the last hearing, your Honor indicated that you wanted us to bring Dr. DeRamus for	10 11	monopolization in this case?  A. Yes, I did.  Q. And were either of those conclusions challenged, as
10 11 12	I think at the last hearing, your Honor indicated that you wanted us to bring Dr. DeRamus for questioning.	10 11 12	monopolization in this case?  A. Yes, I did.  Q. And were either of those conclusions challenged, as far as you know?
10 11 12 13	I think at the last hearing, your Honor indicated that you wanted us to bring Dr. DeRamus for questioning.  THE COURT: Right.	10 11 12 13	monopolization in this case?  A. Yes, I did.  Q. And were either of those conclusions challenged, as far as you know?
10 11 12 13 14	I think at the last hearing, your Honor indicated that you wanted us to bring Dr. DeRamus for questioning.  THE COURT: Right.  MR. TASKIER: Understanding that and hoping that	10 11 12 13 14	monopolization in this case?  A. Yes, I did.  Q. And were either of those conclusions challenged, as far as you know?  A. With regard to the market definition, while Eaton's
10 11 12 13 14 15	I think at the last hearing, your Honor indicated that you wanted us to bring Dr. DeRamus for questioning.  THE COURT: Right.  MR. TASKIER: Understanding that and hoping that we can put his testimony in a quick and understandable	10 11 12 13 14 15	monopolization in this case?  A. Yes, I did.  Q. And were either of those conclusions challenged, as far as you know?  A. With regard to the market definition, while Eaton's experts had criticisms of my analyses, I don't believe they
10 11 12 13 14 15	I think at the last hearing, your Honor indicated that you wanted us to bring Dr. DeRamus for questioning.  THE COURT: Right.  MR. TASKIER: Understanding that and hoping that we can put his testimony in a quick and understandable framework, we prepared a brief direct examination for him.	10 11 12 13 14 15	Monopolization in this case?  A. Yes, I did.  Q. And were either of those conclusions challenged, as far as you know?  A. With regard to the market definition, while Eaton's experts had criticisms of my analyses, I don't believe they proposed an alternative market definition, nor did they
10 11 12 13 14 15 16	I think at the last hearing, your Honor indicated that you wanted us to bring Dr. DeRamus for questioning.  THE COURT: Right.  MR. TASKIER: Understanding that and hoping that we can put his testimony in a quick and understandable framework, we prepared a brief direct examination for him.  Of course, your Honor should feel free to interrupt and ask	10 11 12 13 14 15 16 17	Monopolization in this case?  A. Yes, I did.  Q. And were either of those conclusions challenged, as far as you know?  A. With regard to the market definition, while Eaton's experts had criticisms of my analyses, I don't believe they proposed an alternative market definition, nor did they challenge, from what I recall the testimony, the my
10 11 12 13 14 15 16 17	I think at the last hearing, your Honor indicated that you wanted us to bring Dr. DeRamus for questioning.  THE COURT: Right.  MR. TASKIER: Understanding that and hoping that we can put his testimony in a quick and understandable framework, we prepared a brief direct examination for him.  Of course, your Honor should feel free to interrupt and ask any questions you have at any time. But that is how we	10 11 12 13 14 15 16 17	A. Yes, I did.  Q. And were either of those conclusions challenged, as far as you know?  A. With regard to the market definition, while Eaton's experts had criticisms of my analyses, I don't believe they proposed an alternative market definition, nor did they challenge, from what I recall the testimony, the my conclusion that Eaton has monopoly power in a relevant
10 11 12 13 14 15 16 17 18 19	I think at the last hearing, your Honor indicated that you wanted us to bring Dr. DeRamus for questioning.  THE COURT: Right.  MR. TASKIER: Understanding that and hoping that we can put his testimony in a quick and understandable framework, we prepared a brief direct examination for him.  Of course, your Honor should feel free to interrupt and ask any questions you have at any time. But that is how we thought we would proceed in the first instance.	10 11 12 13 14 15 16 17 18	Monopolization in this case?  A. Yes, I did.  Q. And were either of those conclusions challenged, as far as you know?  A. With regard to the market definition, while Eaton's experts had criticisms of my analyses, I don't believe they proposed an alternative market definition, nor did they challenge, from what I recall the testimony, the my conclusion that Eaton has monopoly power in a relevant antitrust market.
10 11 12 13 14 15 16 17 18 19 20	I think at the last hearing, your Honor indicated that you wanted us to bring Dr. DeRamus for questioning.  THE COURT: Right.  MR. TASKIER: Understanding that and hoping that we can put his testimony in a quick and understandable framework, we prepared a brief direct examination for him. Of course, your Honor should feel free to interrupt and ask any questions you have at any time. But that is how we thought we would proceed in the first instance.  THE COURT: All right. So, in other words, you	10 11 12 13 14 15 16 17 18 19	monopolization in this case?  A. Yes, I did.  Q. And were either of those conclusions challenged, as far as you know?  A. With regard to the market definition, while Eaton's experts had criticisms of my analyses, I don't believe they proposed an alternative market definition, nor did they challenge, from what I recall the testimony, the my conclusion that Eaton has monopoly power in a relevant antitrust market.  MR. OSTOYICH: Your Honor, I don't want to
10 11 12 13 14 15 16 17 18 19 20 21	I think at the last hearing, your Honor indicated that you wanted us to bring Dr. DeRamus for questioning.  THE COURT: Right.  MR. TASKIER: Understanding that and hoping that we can put his testimony in a quick and understandable framework, we prepared a brief direct examination for him. Of course, your Honor should feel free to interrupt and ask any questions you have at any time. But that is how we thought we would proceed in the first instance.  THE COURT: All right. So, in other words, you lay kind of the foundation testimony and then defendant's	10 11 12 13 14 15 16 17 18 19 20 21	Monopolization in this case?  A. Yes, I did.  Q. And were either of those conclusions challenged, as far as you know?  A. With regard to the market definition, while Eaton's experts had criticisms of my analyses, I don't believe they proposed an alternative market definition, nor did they challenge, from what I recall the testimony, the my conclusion that Eaton has monopoly power in a relevant antitrust market.  MR. OSTOYICH: Your Honor, I don't want to interrupt, but just for the record, I'm going to object to
10 11 12 13 14 15 16 17 18 19 20 21	I think at the last hearing, your Honor indicated that you wanted us to bring Dr. DeRamus for questioning.  THE COURT: Right.  MR. TASKIER: Understanding that and hoping that we can put his testimony in a quick and understandable framework, we prepared a brief direct examination for him. Of course, your Honor should feel free to interrupt and ask any questions you have at any time. But that is how we thought we would proceed in the first instance.  THE COURT: All right. So, in other words, you lay kind of the foundation testimony and then defendant's counsel would be free to examine?	10 11 12 13 14 15 16 17 18 19 20 21	A. Yes, I did.  Q. And were either of those conclusions challenged, as far as you know?  A. With regard to the market definition, while Eaton's experts had criticisms of my analyses, I don't believe they proposed an alternative market definition, nor did they challenge, from what I recall the testimony, the my conclusion that Eaton has monopoly power in a relevant antitrust market.  MR. OSTOYICH: Your Honor, I don't want to interrupt, but just for the record, I'm going to object to his characterization of that.

### DeRamus - direct

- 1 you did not apply any actual economic test to arrive at your
- 2 conclusion that their conduct was exclusionary and caused
- 3 harm to competition?
- 4 A. I understand they make that assertion, yes.
- 5 Q. Are you aware also that Eaton contends that you merely
- 6 reviewed some documents and did not apply any testable,
- 7 verifiable economic theory and that your conclusion is just
- **8** your say-so?
- 9 A. I do understand they make that assertion, yes.
- 10 Q. Did you conduct economic testing to determine whether
- 11 Eaton's conduct was anticompetitive?
- 12 A. Yes, I do.
- 13 Q. How many economic tests did you conduct and include in
- 14 your report?
- 15 A. With regard to the conclusion that Eaton's conduct was
- 16 anticompetitive, I performed at least six different tests,
- 17 and possibly seven, depending on how you want to count
- 18 them.
- 19 Q. Can you briefly tell us what the first test was that
- 20 you conducted?
- 21 A. I first analyzed whether Eaton's conduct gave rise
- 22 to barriers to entry or exacerbated previously existing
- 23 barriers to entry.
- 24 Q. Did you provide a standard economic test performed by
- 25 economists in assessing whether conduct was anti-competitive

### DeRamus - direct

- 1 A. I also analyzed prices paid by OEM over the long
- 2 running.
- 3 Q. And is that also a standard economic test that's
- 4 accepted by economists to test whether conduct was
- 5 anticompetitive?
- 6 A. Yes, it's.
- 7 Q. And what was the fifth test you conducted?
- 8 A. The fifth test was analysis of the impacts of Eaton's
- 9 conduct on innovation and, in particular, the delay and cost
- 10 in introducing innovations that would have been valuable to
- 11 customers in this market.
- 12 Q. And is that also a standard test?
- 13 A. Yes
- 14 Q. And was there a sixth test that you conducted?
- 15 A. Yes. I, in my, as part of my econometric analysis, I
- 16 also analyzed whether Eaton's conduct, in fact, had a
- 17 significant impact on ZF Meritor's sales and caused its
- 18 exclusion from the market, and I concluded that it did.
- 19 Q. And is that a standard tested that's used by
- 20 economists as well'
- 21 A. Yes. Econometrics, a standard methodology that is
- 22 used by economists.
- 23 Q. In performing all of these tests, what was your
- 24 conclusion with regard to whether Eaton's conduct was
- 25 anticompetitive?

ç

8

### DeRamus - direct

- in antitrust cases?
- 2 A. Yes. An analysis of various entry is a fundamental
- 3 part of antitrust analysis and has long been used in
- 4 economists in assessing whether conduct was anticompetitive.
- **5 Q.** And was there a second test that you used?
- 6 A. Yes. I analyzed whether the defendant's conduct
- 7 effectively resulted in raising rivals' costs.
- 8 Q. And what did you do to conduct that test?
- 9 A. I analyzed whether the costs, the production costs of
- 10 ZF Meritor for certain of their transmissions were increased
- 11 as a result of their inability to -- as a result of Eaton's
- 12 conduct preventing them from competing from an adequate
- 13 share of the market.
- 14 Q. And is that a standard economic test that's used in
- 15 these cases?
- 16 A. Yes, it is.
- 17 Q. And what was the third test you conducted to determine
- 18 whether Eaton's conduct was anti-competitive?
- 19 Anti-competitive?
- 20 A. I did an analysis of prices paid by end customers.
- 21 Q. And is that also a standard economic test?
- 22 A. Yes. An analysis of prices and price elevation as a
- 23 result of anticompetitive conduct is perhaps the sine qua
- 24 non of antitrust analysis.
- 25 Q. And the fourth test that you conduct?

### DeRamus - direct

- 1 A. I concluded from an economist's perspective that it
- 2 was, indeed, anticompetitive.
- 3 Q. Now, did you also calculate plaintiffs damages in this
- 4 case?
- 5 A. Yes, I did.
- 6 Q. Now, focusing on the damages, did you reach an opinion
- 7 about the type or types of damages that the plaintiff
- 8 suffered?
- 9 A. Yes.
- 10 Q. What were those damages?
- 11 A. I concluded that there were two types of damages that
- 12 plaintiff -- that the plaintiff suffered in this case. One,
- 13 the lost profits that would have been earned by ZF Meritor
- 14 up through 2009, and the second component of damages was the
- 15 lost enterprise value, i.e., the reduction in the going
- 16 concern value of ZF Meritor from the date of my report,
- 17 2009, forward.
- **18 Q.** And when you say that they were but-for profits, they
- 19 were but for in what context?
- 20 A. They were -- the estimate of damages are the profits
- 21 that ZF Meritor would have earned in the absence of Eaton's
- 22 anticompetitive conduct, accounting for other factors in the
- 23 market unrelated to this conduct.
- 24 Q. All right. So this first page is a calculation, is
- 25 basically is the rough description of how you calculated

### DeRamus - direct

- 1 total damages? Lost profits plus lost enterprise value
- 2 equals plaintiffs total damages; is that correct?
- 3 A. Yes. I would say that's my overarching methodology
- 4 computing damages in this case.
- **5 Q.** Was that a standard economic method of estimating
- 6 damages in an antitrust case?
- 7 A. Yes, it is.
- 8 Q. All right. Let's now talk briefly about your lost
- 9 profits analysis. In the most basic terms in an antitrust
- 10 case involving harm to a competitor, how do you calculate
- 11 lost profits?
- 12 A. Lost profits is calculated as the incremental units
- 13 that ZF Meritor would have earned in the but-for world,
- 14 i.e., absent anticompetitive conduct multiplied by the
- 15 profit that they would have earned on those units.
- 16 Q. And is that a standard economic formula for
- 17 calculating lost profits?
- 18 A. Yes, it is.
- 19 Q. How many calculations did you do using that formula?
- 20 A. I did five separate damages calculations.
- 21 Q. And in each of those methods, those five calculations,
- 22 did you calculate lost profits by multiplying some measure
- 23 of lost unit sales by lost profit per unit?
- 24 A. Effectively, yes. There are some differences in the
- 25 details, the computations, but effectively it comes down to

### DeRamus - direct

12

13

- 1 take an average of the estimate they believe to be
- 2 reasonable.
- 3 Q. Let's turn to your first method. What was your first
- 4 method?
- 5 A. First method -- the first method was I relied on the
- 6 strategic business plan forecast prepared by ZF Meritor. I
- 7 used that method both, and in that method I used the
- 8 strategic business plan both for the estimate of the but-for
- 9 units as well as the per-unit profit computations.
- 10 Q. And why did you use that particular plan, sir?
- 11 A. I'm sorry. Why did I use that particular method or
- 12 the source?
- 13 Q. The source.
- 14 A. The source? I reviewed a wide range of business plans
- 15 that were available. The wide range of information
- 16 available to me at the time, and this particular business
- 17 plan was prepared at or about the beginning of the conduct
- 18 at issue. I.e., November 2,000 was when it was presented to
- 19 the Board of Directors. It was prepared by -- presented by
- 20 experienced finance professionals, individuals with the
- 21 leadership of ZF Meritor, the President, Rick Martello, the
- 22 CFO of the company as well. It was accepted by the Board of
- 23 Directors, and there were investment decisions made as a
- 24 result of the -- of that particular business plan.
  - It was also revised relative to previous

11

### DeRamus - direct

- multiplying incremental units, i.e., lost of number of
- 2 transmissions sold that have been would have been sold in
- 3 the but-for world by a measure of profits.
- 4 Q. Now, what was your reason for measuring the lost
- 5 profits five different ways?
- 6 A. In my -- in the liability section of my report, I came
- 7 to the conclusion that there was significant dislocations
- 8 market caused by Eaton's anticompetitive conduct, that it
- 9 ultimately caused ZF Meritor to exit the market, ZF Meritor
  - being the only significant competitor in this market.
- 11 And as are result, there is going to be some
- 12 inherent uncertainty with regard to the but-for world, the
- 13 profits that ZF Meritor would have earned in the but-for
  14 world. In doing it five different ways allows me to provid
- 14 world. In doing it five different ways allows me to provide
- 15 a range of results, balances the high and the low, what I
- 16 consider to be reasonable estimates of damages. It allows
- 47
- 17 me to use all of the available data that I felt was
- 18 reasonable, and it also allows me to derive an estimate of
- 19 the expected value. Take an average of the five, since I do
- 20 not consider any single methodology to provide the most
- 21 accurate estimate of damages.
- 22 Q. Is that a standard way of approaching damages
- 23 calculation?

10

- 24 A. Yes. Economists will typically look at all available
- 25 information and will often construct a range of damages and

- DeRamus direct
- 1 business plans, revised downward to account for other
- 2 factors occurring in the market.
- 3 Q. What other factors?
- 4 A. One of the largest was -- this was in 2000, the
- 5 overall market was beginning to decline. And the Board of
- 6 Directors asked the company to revise -- to revise its
- 7 business plan to produce this particular one in light of
- 8 that and various other factors.
- 9 Q. Now, in your experience as an economist, is it
- 10 standard to use a company's business forecasts or internal
- 11 business predictions to analyze future market shares or
- 12 profits?

- 13 A. Yes. It provides contemporaneous information about
- 14 the perspectives of knowledgeable individuals. That is,
- 15 they are likely to be particularly reliable if they are
- 16 prepared by a company that is in business, has a proven
- 17 track record in that business, and is prepared with adequate
- 18 due diligence with regard to the underlying assumptions.
- 19 Q. And what did you use the strategic business plan for
- 20 in this first method of calculating lost profits?
- 21 A. I used the business plan as the basis for estimating
- 22 the but-for market share that ZF Meritor would have earned
- absent its anticompetitive conduct as well as for a measure
- 24 of the of pre-profits, using this first method using the

### DeRamus - direct

- as I described it in my report, the measure of profits.
- 2 So you -- and how did you calculate the lost units?
- 3 I took the units that were specified in the November
- 2000 strategic business plan. I applied it to the total
- size of the market forecasted by ZF Meritor for the same
- 6 time period and also prepared contemporaneously for the 2000
- 2005 time period. I took the ratio of the two, and that
- 8 gave me my estimate of their expected market shares that
- 9 were prepared at the time of the -- at the time of the
- 10 strategic business plan.
- 11 Why did you use the actual -- why did you correct the
- 12 number that was in the report with application of the actual
- 13 number of trucks built?
- 14 Well, by taking the projected market share that the
- 15 company had devised and multiplying it by then the actual
- 16 number of total truck built that were actually built over
- 17 the 2000, 2005, 2009 time period, it allows me to account
- 18 for other factors, economic factors and the effect of the
- 19 demand for trucks that would have affected ZF Meritor's
- 20 but-for sales that would have been unrelated to Eaton's
- 21 anticompetitive conducts.
- 22 Q. I'm sorry. Unrelated?
- 23 A. Yes. Unrelated to Eaton's anticompetitive conduct.
- 24 Q. So that was a screening effort?
- 25 Δ Yes, it was.

### DeRamus - direct

- business plan higher than the actual OEM invoice prices as
- 2 found in your report in figure 17?
- A. No, they are not.
- 4 Q. Are you aware that Eaton accuses you of using
- 5 but-for prices that are higher than actual prices charged?
- 6 A. Yes, I'm aware they make that allegation.
- 7 Q. Is that what you did?
- R Δ No. Absolutely not.
- 9 Q. Do you have a response to that?
- 10 A. Certainly. This is a subject matter that was
- 11 the -- the subject of questioning by Eaton during my
- 12 deposition. We discussed this particular subject at
- 13 some length, and I described in detail what I did and why I
- 14 did it. And in their response, they -- it appears to me
- 15 that they've ignored and mischaracterized my testimony on
- 16 that subject.
- 17 I would say, first, the -- as I mentioned
- 18 earlier, the issue is irrelevant because the only parameter
- 19 of interest is the damage calculation, is the pre-profit,
- 20 not the per unit price per se. As long as prices and costs
- 21 are measured on a consistent basis, which I did verify
- 22 through multiple methods, then the estimate of damages is
  - reasonable.

23

15

- 24 Q. That's because you're only dealing with a percentage
- 25 of, a profit number?

17

16

### DeRamus - direct

- So did you do any verification of the projected prices
- 2 and costs in this strategic business plan?
- 3 Yes. I verified -- particularly, the parameter of
- 4 interest is the per-unit profit, and I verified that the
- 5 per-unit profits in the projections were consistent with
- 6 actual per-unit profits imported in that same document that,
- 7 in fact, tie to the company's audited financial statements.
- 8 I verified that they were consistent with the per-unit
- 9 profits that the company had earned previously and that
- 10 Eaton, in fact, had earned, and significantly lower than the
- per-unit profit measured in the same manner by Eaton. 12 Did you do anything else to satisfy yourself that the
- 13 projections in the strategic business plan were a reliable
- 14 basis for your lost profit calculations?
- 15 Yes. My next -- the second method that I applied, I
- 16 constructed an econometric analysis with which to assess
- 17 the reasonableness of those -- the market share projections.
- 18 Now, did you do any calculations to arrive at a
- 19 price or cost figure that was independent of the business
- 20 nlan?

11

- 21 No, I did not separately estimate but-for prices or
- 22 but-for costs. As I said, the primary parameter of interest
- 23 for the purposes of the damage calculation in this case is
- 24 the per-unit profit.
- 25 Q. And are the projected or but-for prices in the

### DeRamus - direct

- 1 That is correct. Profit is the ultimate variable of
- interest. It's not a price-fixing case, as I explained in
- my deposition, in which elevation of prices is maybe the
- primary parameter of interest. Here, damages to ZF Meritor
- are the lost sales and lost profits, so therefore profit is
- the variable of ultimate interest.
- 7 Q. Is there another reason why the characterization of
- 8 your testimony is incorrect?
- 9 Yes. It's a, very much of an apples and oranges
- 10 comparison, or maybe apples and bicycles comparison.
- 11 The question came up in comparing one
- 12 particular line in one of my tables with a separate figure
- 13 in a different part of my report, and the products that are
- 14 included in table 5 are very different than the products
- 15 that are included in the other table, in the figure of my
- 16 report. It is a P&L number. It is net revenue.
- 17 So it is computed on a different basis. It
- 18 includes additional revenues that aren't included in the 19 other figure. I'm happy to go through all the details of
- 20 those differences, if you would like.
  - And -- but, ultimately, it comes down to a
- 22 difference in the product mix between the figure in my
- 23 report that they pointed to and the line, one line on my
- 24 table.
- And as I emphasized in my deposition, Eaton

### DeRamus - direct

- has focused on one particular product line in my testimony;
- 2 namely, the G-Platform combined line of products, and
- they've ignored the FreedomLine, which comprises a
- substantial portion of damages. And, in fact, averaged
- across both products on a weighted average basis, the prices
- 6 implied by my table are, in fact, lower than the prices in
- 7 the -- in the figure, the corresponding figures of the
- 8 report. That's if I were to substitute out the prices that
- 9 they refer to as the actual prices in place of my but-for
- 10 prices, damages would only go up, not down.
- 11 Thank you.
- 12 So once you calculated the but-for profit, what
- 13 did you do next?
- 14 I computed them on a present value basis and to
- 15 account for the time value of money. So dollars, nominal
- 16 dollars in 2002, 2003, for example, were brought up to a
- 17 2009 basis. I.e., as of the date of my report.
- 18 So there are essentially three lost profits damages
- 19 numbers that you come to. One is nominal, one is risk-free
- 20 discount, and one is on the cost of debt?
- 21 Α. That's correct. For each of my damages, I do report
- 22 three separate numbers. One, the nominal value; and then
- 23 right below that, I report the present value using the risk-
- free interest rate; and below that, I report a present value 24
- 25 using the cost of debt, which I believe to be a reasonable
  - 19

### DeRamus - direct

- estimate, and is a factor of -- a present value computation
- and the one that I ultimately use and rely upon in my .2
- 3 overall conclusion of damages.
- 4 Q. Now, you also said you had done an economic --
- 5 econometric method analysis and that's Method 2?
- 6 Α. That is correct.
- 7 Q. What is the econometric model that you use?
- 8 Econometric model is a statistical model to estimate
- 9 ZF Meritor's but-for market shares based on a variety of
- 10 independent variables I've identified and estimated.
- 11 Q. And what purpose does that serve?
- 12 It serves several purposes. First, it provides a way
- 13 of confirming the reasonableness of the strategic business
- 14 plan as a source of information on but-for market shares.
- 15 It also provides a methodology that I can
- 16 use in my liability analysis to determine whether there was
- 17 a structural break in the market. I.e., whether there was a
- 18 significant difference in ZF Meritor's experience prior to
- 19 the beginning of the core conduct period and drafting, and
- 20
- also provides a separate way of estimating damages. 21 Q. You constructed an econometric model to test those
- 22 issues?
- 23 Α. Yes, I did.
- 24 Q. And did you test your econometric model to make sure
- that it was reliable? 07/23/2009 12:14:13 PM

### DeRamus - direct

- 1 Yes, I did.
- 2 Q. How did you satisfy yourself that it was a reliable
- 3 model?
- 4 Α. I performed a variety of standard statistical tests to
- determine that the model was appropriately specified. I.e., 5
- 6 test for autocorrelation. I also looked at the goodness of
- 7 fit, how well my model fit the data, and it was a very high
- 8 R-squared. I also performed an alternative specification
- 9 of the model beginning the conduct period in February of
- 10
- 11 In the liability section of my report, I had
- 12 concluded that there was significant evidence as an
- 13 economist to conclude that some of the conduct that Eaton
- 14 was engaged in occurred prior to that time period, and it
- 15 showed me that the -- and it provided but-for market
- 16 shares. In fact, significantly higher using the
- 17 February 1999 starting point for the econometric model
- 18 as opposed to July 2000, which is what I used for this
- 19 particular computation.
- 20 So if you can walk us through the chart, can you
- 21 tell us what you did under but-for unit sales with the
- 22 projected share from the econometric model?
- 23 Certainly. As with the first method, I applied the
- 24 projected shares from the econometric model to the actual
- 25 number of trucks built over the 2000 to 2009 time period.
  - 21

20

### DeRamus - direct

- I.e., what I refer to as my explicit forecast period to get
- the but-for unit sales, I subtracted out ZF Meritor's actual
- 3 unit sales during that time period, and I multiplied it by
- the same but-for measure of per-unit profits that I
- 5 discussed in the first computations.
- 6 Q. The same method?
- 7 Α. Effectively the same method using an econometric
- model for the -- for one of the inputs. 8
- 9 Q. Now, you testified that you calculated damages a third
- 10 way?
- 11 Α. Yes.
- 12 Q. Tell us what way that was.
- 13 In the third computation, I accounted for the Α.
- possibility that ZF Meritor would have incurred additional 14
- 15 fixed costs during the 2004 and 2009 time period.
- 16 ZF Meritor effectively stopped -- the joint
- 17 venture was effectively dissolved at the end of 2003. It
- 18 was offered in a different framework going forward, and the
- 19 first method accounted for marginal costs. So this provides
- 20 for an additional alternative way of damages.
- 21 Q. Why did you want to provide for more than marginal
- 22 costs?
- 23 Α. Because I wanted to account for the possibility that
- they would have incurred additional costs and, therefore,
- which, in fact, would have lowered, and did lower, the Page 18 to 21 of 125 6 of 50 sheets

### DeRamus - direct

- estimate of damages.
- 2 And that's how it affected the calculation?
- 3 Yes. It lowered the estimate of damages.
- Q. Now, you also did a fourth method; is that not right?
- 5 Α. That's correct.
- 6 Q. And how does that differ from the third method?
- 7 In the fourth method, I took the additional fixed
- 8 costs that had been projected for the 2000 and 2003 period,
- 9 and I also subtracted those additional fixed costs from the
- 10 estimate of ZF Meritor's but-for profits.
- 11 Q. So you took ten years of fixed costs out as opposed to
- 12 five?
- 13 A. That's correct. As I stated in my report, while I
- 14 consider that unnecessary, because I do have 2000/2003 as
- the actual experience of the company when they were in 15
- 16 operations, I, nevertheless, thought it was helpful in
- 17 establishing a lower bound of the estimate.
- 18 Now, these four method are all a variance of the first
- 19 method. Is that not right?
- 20 A. They are all a variant of the method that is the --
- 21 the primary method is but-for profits and lost enterprise
- 22 value, which we've not discussed. That is the overarching
- 23 method, and these are simply ways of implementing inputs.
- 24 And the inputs that were used were all derived from
- 25 the strategic business plan that you selected?

### DeRamus - direct

24

25

- 1 So this particular method does not use anything that
- 2 was found in the strategic business plan, but you used,
- 3 rather, what Eaton's actual experience was?
- 4 For the profitability, the per-unit profitability
- 5 metrics, that is correct. I did use the forecast from the
- 6 strategic business plan, the applied forecast of the market
- 7 share statistics, although I could certainly have -- I could
- have just as easily used the results of my econometric model
- 9 of but-for market shares, and that would have simply
- 10 resulted in a higher damage --
- The discussion we had previously about but-for prices 11 Q.
- 12 and the criticisms that were levied at you, does your use of
- 13 this have any bearing on that particular criticism?
- 14 Well, it certainly shows that if, for some reason, and
- 15 I -- that I can't fully comprehend, if the analysis that I
- 16 was -- that I did on the previous methods were deemed
- 17 unreliable, this provides a method that is independent of
- 18 those criticisms.
- 19 Q. This is independent of what was in the strategic
- 20 business plan for those purposes, for the purposes of
- 21 calculating profit?
- 22 It is independent of any price assumptions in that
- 23 business plan, yes.
- 24 Q. Thank you.

25

Now, these are the five methods you utilized to

23

### DeRamus - direct

- The econometric model provides an internal input for
- 2 the market share computations. The but-for profit for each
- 3 of these methods is ultimately derived from the strategic
- 4 business plan, both for the estimate of variable costs and
- 5 fixed costs, although as I mentioned before, I did verify
- that the -- the per unit cost, the variable cost, per-unit 7
- profit from the strategic business plan was equivalent to
- 8 other data sources, so the result would have been equivalent
- 9 if I had substituted alternative sources of information.
- 10 Now, you also did a fifth method that did not rely on
- 11 the per-unit profit derived from the strategic business
- 12 plan; is that correct?

6

- 13 Α. That is correct.
- 14 Q. Can you tell us what you did in your fifth method?
- 15 The fifth method, rather than relying on forecasts of
- 16 profit and profitability, I looked to Eaton's actual
- 17 profits, and here I used a more conservative -- I'm sorry --
- 18 a lower measure of profits, operating profits, which is --
- 19 includes all fixed costs, all depreciation. And this is,
- 20 again, Eaton's actual experience over the 2000 and 2009 time
- 21 period.
- 22 I applied a measure of ZF Meritor's but-for
- 23 market share to that -- to the estimate of the
- 24 profitability -- operating profits available in the market
  - and to then derive the estimate of lost profits.

### DeRamus - direct

- calculate lost profits, the one portion of your damages
- 2 figure that's lost profits; is that correct?
- 3 A. That is correct.
- 4 And you averaged them to come to the number that you
- 5 postulated in your report; is that correct?
- 6 Δ. That's correct.
- 7 Q. All right. And then you took the lost enterprise
- 8 value?
- 9 A.
- 10 Q. And you calculated that how, sir?
- 11 For the lost enterprise value, or loss of going
- 12 concern value, depends on how -- the particular name you
- 13 want to attach to it, I applied a standard multiples
- 14 approach.

15

### I looked to --

- 16 Q. What is a standard multiples approach?
- 17 Α. A multiples approach, or comparables approach, is when
- 18 an analyst goes to define or identify comparable publicly
- 19 fit companies, assess the value of those publicly traded
- 20 companies, those comparable companies relative to some
- 21 financial measure, whether it's relative to sales or some
- 22 measure of profits, and then applies -- can apply that
- 23 multiple to the business of interest. In this case, ZF
- 24 Meritor's but-for profitability.
- 25 Is this a standard method of valuation of a going

### DeRamus - direct

- 1 concern?
- 2 A. Yes, it is.
- 3 Q. So how did you go about doing that?
- 4 A. I identified two particular comparables that I thought
- 5 were quite reasonable. Namely, ArvinMeritor and Eaton
- 6 themselves, both of whom are public traded companies. The
- 7 parent company, Eaton is obviously involved in this issue,
- 8 and involved in the same industry, producing some more
- 9 products, and ArvinMeritor, the parent company, one of the
- 10 owners of ZF Meritor, the joint venture. They are publicly
- 11 traded companies, very comparable in terms of what they do,
- 12 the products they make. And that provided me strong comfort
- 13 that the valuations, the multiples, would be reasonable.
- 14 And I also confirmed that using two alternative
- 15 sets of comparables, namely, a set of comparables that
- 16 investments analysts identified as being comparable to Eaton
- 17 itself. I believe there were five such companies identified
- 18 by the U.S. analysts in that approach. And then another
- 19 approach where I independently went to databases that we
- 20 have of publicly traded companies and identified companies
- 21 in this particular industry and reviewed the business
- 22 descriptions and determined that those were a reasonable set
- 23 of approximately 11 companies.

DeRamus - direct

- 24 And I confirmed that the multiples obtained from
- **25** any of these alternatives are within a very narrow range.

27

- Q. And you used those multiples on projected earnings
- 2 that ZF Meritor would have earned but for Eaton's conduct to
- 3 achieve what the value of the going concern would have been,
- 4 lost enterprise value?
- 5 A. That is correct.
- 6 Q. Now, did you use any other models to check this
- 7 calculation?

1

- 8 A. Yes. I applied what's often referred to as the Gordon
- $9\,$   $\,$  growth model. As I mentioned in my report, a valuation of
- 10 going concern value is effectively equivalent to estimating
- 11 the present value of the future cash flows of the company.
- That approach to doing valuation can besomewhat fraught with differences of opinion as to what are
- 14 appropriate growth rates, what are appropriate discount
- 15 rates, and so on. So, therefore, I felt this was the -- the
- 16 lost enterprise value, the multiple approach, was the most
- 17 straightforward, most reasonable method.
- 18 But since I have estimates of ZF Meritor's
- 19 but-for operating profit, or EBIT, earnings before interest
- 20 and taxes, and earnings before interest taxes, depreciation,
- 21 amortization, for a benchmark time period, I can determine
- 22 what is effectively an implied present value of those future
- 23 cash flows, assuming that those cash flows would grow at a
- 24 very modest rate.
- 25 I used the producing price index for the

### DeRamus - direct

28

- 1 industry at issue, durable goods manufacturing as the
- 2 estimate of the expected growth rate, which I believe is
- 3 approximately two percent. And I used an estimate of the
- 4 cost of capital in this company, in this business, or
- 5 approximately 13-and-a-half percent, which I derived from a
- 6 well-respected publisher, Gibbitson's, publishes cost of
- 7 capital estimates for various industries.
  - And dividing a benchmark period of cash flow
- 9 by the difference between the cost of capital and the
- 10 expected growth rate of cash flows gives you an implied
- an expected growth rate of easily hows gives you are impliced
- 11 valuation of what the present value of those future cash
- 12 flows is

8

- 13 Q. And did that confirm your alternative initial
- 14 calculation?
- 15 A. Yes, it did.
- 16 Q. It tied to it?
- 17 A. The result -- you can apply it different ways. I
- 18 applied the -- one I discussed in my report, I applied to
- 19 the lower valuation of using the ZF Meritor fourth method
- 20 that we went through here to the ZF Meritor but-for EBITDA,
- 21 earnings before interest, taxes, depreciation and
- 22 amortization.

23

25

1

- And the estimate using the Gordon growth model
- 24 approach resulted in a valuation of approximately
  - \$50 million higher than using the multiple approach.

29

- DeRamus direct

  So it provided me with the assurance that the
- 2 multiple approach was indeed reasonable and I had not
- 3 somehow cherry-picked a bad set of comparables that would
- Sometion cherry-picked a bad set of comparables that wou
- 4 have given me an inflated estimate of damages.
- ${f 5}$   ${f Q}$ . So is it true for each year of damages, you calculated
- 6 for each fiscal year of damages for ZF Meritor, you
- 7 calculated a damages figure?
- 8 A. That is correct. In each of the tables in my report,
- 9 I provide a -- an annual summary year by year of the
- 10 damages, both on a, again, on a nominal basis and on a
- 11 present value basis for all of the methodologies.
- 12 Q. So if the jury in this case at some point decided to
- 13 choose five years or four years or three years, it could do
- 14 that easily in terms of calculating how much dams accrued in
- 15 whatever period it chose?
- 16 A. Yes. All the figures are there in my report.
- 17 MR. TASKIER: Your Honor, Dr. DeRamus could
- $18\,$   $\,$  go, and I could have him go for ten more hours if we wanted
- $\begin{tabular}{ll} \bf 19 & to drill down on each of these things, but I didn't think \\ \end{tabular}$
- 20 you would appreciate it.
- 21 THE COURT: I think it's better if we have a
- 22 defendant focus on its concerns and then you can come back,
- 23 certainly redirect.
- 24 MR. TASKIER: Thank you, your Honor.
  - THE COURT: Thank you very much.

25

8 of 50 sheets

#### DeRamus - cross

- MR. OSTOYICH: Thank you, your Honor. I have a 2 few questions.
- 3
  - CROSS-EXAMINATION
- 4 BY MR. OSTOYICH:
- Dr. DeRamus, thank you.
- 6 Dr. DeRamus, fundamentally, I think I heard you 7 say you applied a but-for methodology for determining the 8 profits you believe the plaintiffs would have earned absent
- 9 Eaton's allegedly anticompetitive conduct.
  - Is that fair?
- 11 That's generally fair. The but-for world, it's a term 12 of art that's often used in calculating -- damage calculation methods. It does not really tell you exactly
- 13 14 what I did.
- 15 It is -- as I described, the overall method is 16 one of but-for profits and but-for enterprise value. So in a sense, it does reflect the world that would have occurred 17
- absent Eaton's anticompetitive conduct. 19 All right. And a world without Eaton's allegedly
- 20 anticompetitive conduct is a more competitive world than the
- 21 actual world; is that right?
- 22 That is correct.
- 23 Q. And a more competitive world than the actual world
- 24 would have lower prices than the actual world; is that
- 25 riaht?

1

10

18

#### DeRamus - cross

32

- not do an independent determination of but-for prices in
- this case: is that correct?
- 3 As part of my damages analysis, I did not conduct an
- 4 independent estimate of but-for prices, that's correct.
- 5 Q. And as a result, Dr. DeRamus, what price in your
- 6 but-for world is Eaton selling its ten-speed high torque
- 7 manual transmissions?
- 8 I don't have a specific estimate of the specific -- a
- 9 specific estimate that I derived for that.
- 10 Q. What price is Eaton's selling its 13-speed manual
- 11 transmissions in your but-for world?
- 12 A. Again, I don't have a specific estimate of that.
- 13 Q. What price, Dr. DeRamus, what price is ZF Meritor
- 14 selling its performance transmissions in your but-for world?
- 15 Α. Again, I give you the same answer I just gave.
- 16 Q. How many performance transmissions is ZF Meritor sell
- 17 in fiscal year 2003 in your but-for world?
- 18 I'm sorry. ZF Meritor?
- 19 Q.
- 20 Α. As I -- I think we discussed in my deposition, the way
- 21 I presented the numbers was primarily based on the overall
- 22 line haul transmission market. I consider line haul and
- 23 performance transmissions to be separate relevant markets.
- 24 And the bulk of ZF Meritor's production in the but-for world
- 25 I estimated to be line haul transmissions, although I saw

31

# DeRamus - cross

- In general, that's -- that is what I would expect,
- 2 although as I mentioned, I did not do an estimate of -- an
- 3 explicit estimate of but-for prices. And I think you also
- 4 need to be careful in terms of which prices you are talking
- 5 about, prices of customers versus prices of OEMs, because
- 6 there are important dynamics in this market that need to be
- 7 taken into consideration.
- 8 Let me go back to something you just said. You did
- 9 not do an independent estimate of but-for prices; is that
- 10 right?
- 11 Α. That's correct. Well, let me step back from that one
- 12 minute.
- 13 With regard to the damages calculation, the
- 14 parameter of interest I focused on was per-unit profits,
- 15 but-for per-unit profits.
- 16 With regard to prices, I did provide extensive
- 17 testimony in my deposition about the impact of Eaton's
- 18 conduct on prices both to end customers and prices to OEMs,
- 19 and in particular, not just -- there's a discussion about
- 20 the removal of the -- the reduction in discounts that Eaton
- 21 provided to the end customers, but also the direct effect
- 22 that Eaton's conduct had in elevating ZF Meritor's prices,
- 23 which is I think one of the most egregious examples of
- anticompetitive consequences of the conduct at issue.
- The answer to my question was pretty simple. You did

- DeRamus cross
- that it is primarily a -- a means of convenience more than
- anything. But I do consider that in the projections
- 3 themselves, ZF Meritor was expected to produce performance
- transmissions. 4
- 5 They were expecting the FreedomLine ultimately
- 6 to be applied to the performance applications. They were
- 7 also developing other performance transmissions, such as the
- 8 11D, which was a potential competitor for Eaton's
- 9 performance transmission, the LL, as well as various 13 and
- 10 14-speed transmissions.
- 11 So I just want to make sure it is clear, as we
- 12 discussed in my deposition, that there's one thing to look
- 13 at the way the numbers are presented. There's another issue
- 14 in terms of what is -- what are the assumptions underlying
- 15 those computations.
- 16 I would say that I would expects ZF Meritor to
- 17 have produced significant number of performance
- 18 transmissions during the time period at issue.
- 19 I gather that. I'm looking for what number, what
- 20 volume of transmissions, performance transmissions, do you
- 21 posit in your but-for world the company would have sold in
- 22 fiscal year 2003?
- 23 I don't have the exact number. Again, the report just
- 24 has one number of the total transmissions in each category,
- 25 the G-Platform and FreedomLine transmissions.

33

34 36 DeRamus - cross DeRamus - cross If you are asking me to estimate as I sit Eaton, produced by ZFM in terms of the prices they sold. I here today, I would probably estimate a couple percentage 2 presented a lot of information about the prices, and I 3 3 assessed the difference, particularly the difference between 4 I'm not asking you for an estimate; I'm asking you the prices and costs, because the primary input in a lost 4 5 what you did in your report. 5 profits case is the per-unit profit. There is a sensitive 6 Shall I hand you a copy of your report, Dr. 6 assessment of price and cost that I did in determining the 7 DeRamus? Would that make it easier? 7 reasonableness of that as an input, 8 No. I have it in front of me. 8 In terms of ZFM's volumes, I certainly did 9 MR. OSTOYICH: Does your Honor have the full 9 extensive analysis of ZFM's but-for volumes. I used the 10 report? 10 strategic business plan as one source of information. I 11 THE COURT: Yes. 11 performed a second method with my econometric method that 12 BY MR. OSTOYICH: 12 verified the reliability of the business plan as a basis for 13 I'm looking for the number you assumed in your but-for 13 but-for market shares, which I then applied to actual 14 world the company would have sold an 11D transmission. 14 volumes, to strip out the effect of other factors unrelated 15 That's a manual performance, low, low load transmission; is 15 to this conduct. 16 that right? 16 Let's turn to your report, Dr. DeRamus. 17 A. 17 MR. OSTOYICH: If I can, your Honor, I will put 18 Q. What number do you assume they would have sold in 18 it up on the screen rather than hand out physical copies. 19 fiscal year '03, because I can't find it in my report. 19 THE COURT: All right. 20 That's right. It's not in my report. My report is --20 BY MR. OSTOYICH: 21 that's where I think you need to be careful in terms of 21 If we could can look at your report, table 5 of your 22 levels of aggregation. I could have done the damages at a 22 report, which is on Page 143, if we can bring that up. 23 level of aggregation, total transmission. 23 MR. OSTOYICH: Your Honor, is it all right if I 24 I thought it was important to separate them out 24 walk up to point out specific lines? I promise I will talk 25 the manual versus FreedomLine transmissions. I did not have 25 loud enough for everyone to hear me. 35 37 DeRamus - cross DeRamus - cross the data to disaggregate the forecasts even further than 1 THE COURT: All right. 2 that. As I testified in my deposition, it's my position ZF 2 BY MR. OSTOYICH: 3 Meritor would have sold a significant number of 3 Now, table 5, Dr. DeRamus, is part of your method one 4 transmissions in the but-for world. 4 for calculating lost profits; is that right? 5 You applied a standard but-for methodology; is that Q. 5 Α. That's correct. 6 right? 6 Q. And this is a table that represents the incremental 7 A. That's correct. 7 revenue that you believe the company would have earned 8 Q. But you have no but-for price for any Eaton absent Eaton's allegedly anticompetitive conduct; is that 8 9 transmission in your report? 9 right? 10 Again, for the damages analysis, I do not. It's 10 Α. Yes. The first step in that computation. 11 unnecessary, although I would say it's there implicitly in Q. 11 Now, if I look at the line 9, which is over here --12 the -- the strategic business plan provides a but-for price, 12 Α. Yes. 13 provides the forecasted revenues. It provides a forecasted 13 Q. -- this is the average but-for price that you believe 14 revenue divided by number of units to get the implied 14 ZF Meritor would have obtained for its transmissions absent 15 forecasted price, but that's not an independent estimate of 15 Eaton's allegedly anticompetitive conduct? 16 the but-for price that I performed. 16 Well, to be clear, the label is probably a little bit

17

18

19

20

21

22

23

24

Q. Oh?
A. You said -- I certainly assessed the prices that Eaton

Let me be clear. Let me be clear about this.

but-for price of any Eaton transmission or the but-for

report, your analysis; is that right?

No, that's not correct.

volume of any particular ZF Meritor transmission in your

You did not do an independent assessment of the

17

18

19

20

21

22 A.

07/23/2009 12:14:13 PM

paid. I looked at an extensive amount of data produced by

Page 34 to 37 of 125 have sold 19,348, and over here you can't see it, but these

pointed to in my -- in my testimony.

of -- is a shorthand. It reflects the revenue, the revenue

that is listed on the business plan, total of revenue. Net

proxy for computational purposes, but is not necessarily

comparable -- it is not comparable to other prices you've

So in fiscal year 2001, you assume the company would

effective revenue per unit. It is used as a price for, a

revenue divided by the number of units. That gives you the

#### DeRamus - cross

- 1 are G-Platform, these are manual transmissions absent
- 2 Eaton's conduct. Is that fair?
- 3 No, it's not fair. I would say first that the
- forecasted number of units is what appears in the business
- 5 plan. I applied the -- I divide the number of units by the
- 6 forecasted total number of trucks to get ZF Meritor's
- 7 forecasted share, which your screen just popped down, but
- 8 was the third, to get the -- on line 4 gets you the actual
- 9 share, multiply it by the actual number of trucks, line 5.
- 10 That then, in turn, gives you row 6, is the but-for number
- 11 of G-Platform transmissions sold.

12

13

17,000 -- 17,886 gives you the number of but-for units applied by the market share projections of

14 the business plan applied to the actual number of units.

15 And one other characterization you made about

- 16 the results or that computation is important to clarify.
- 17 The G-Platform is what the, in the strategic business plan,
- 18 is what was -- how it's labeled by the company. They
- provided two different columns in their forecasts, one for 19 20
- what they call the G-Platform, another one, another column
- 21 which was the FreedomLine, and the G-Platform was
- 22 effectively everything other than the FreedomLine, which
- 23 did include some levels of automation.
- 24 So you had, for example, ESS, Sure Shift.
- 25 Various levels of automation that appear to be -- where

#### DeRamus - cross

40

- total revenues for a given product line obtained from the
- ZF Meritor plan business divided by the number of units.
- 3 THE COURT: I'm confused. I mean so it's not
- 4 really a but-for price? It's something else?
- 5 THE WITNESS: You can think of it as a but-for
- 6 price in the shorthand.
- 7 THE COURT: Well, you are not letting us think
- 8 about it in a shorthand. You continue to explicate what it
- 9 is instead of abut for comprise price.
- 10 So it is not the price that they -- well, it's
- 11 not the price they would sell it for? It's the revenue they
- 12 would get?
- 13 THE WITNESS: There are a couple of different
- 14 prices one has to keep in mind. I apologize if it's a bit
- 15 confusing.
- 16 THE COURT: I don't want to think about more
- 17 than what is here, so tell me again what this is, when you
- 18 say average but-for price.
- 19 THE WITNESS: It is all of the revenues that
- 20 ZF Meritor is earning or projects to earn from the sale of
- 21 the transmissions that are included in this category. So
- 22 it will include, for example, something called aftermarket
- 23 revenues. So if there are additional sales or repairs or
- 24 rebuilds that are done for a given transmission, those
- 25 revenues are counted in the strategic business plan.

39

# DeRamus - cross

- the transmission will cost more to produce and gets a higher
- 2 price in the market than, for example, the 9 and 10-speed
- 3 transmissions. It's also a blend of different kinds of
- 4 transmissions with different torque ratings, and as I said,
- 5 it's a net revenue number, so it will include additional
- 6 revenue items in addition to simply the price of a given
- 7 transmission.
- 8 Q. Dr. DeRamus, bear with me. I only have an
- 9 hour-and-a-half, so I want to get some guicker answers, if
- 10 you would, for me now.
- 11 Now, average but-for price, this is your average
- 12 but-for price that the company would have obtained for every
- transmission, G-Platform transmission sold in each fiscal 13
- 14 year: is that right?
- 15 It is the average per-unit revenue implied by the
- 16 strategic business plan that I believe to be a reliable
- 17 basis for my damage calculation.
- 18 Q. And that average but-for price below is \$3,418; right?
- 19 Fiscal year '00 and fiscal year '01. The high is 3776; is
- 20 that right?
- 21
- 22
- 24
- Again, the average per-unit revenue. For example, it
- does aftermarket revenues as well. There are other revenues 23 other than price.
- Just so the record is clear, every time a
- company talks about but-for price on this schedule, it is

DeRamus - cross

41

- So if you take your car into a car dealership,
- 2 for example --
- 3 THE COURT: All right. So all revenues earned,
- 4 not just from the initial sale, but forever?
- THE WITNESS: That's correct. Well, it is 5
- the revenues they expect to earn in that given year for
- the -- for that particular product line. It's not a
- 8 present value concept or a future earnings. It's a current
- 9 year, these are the current dollars they expect to earn for
- 10 that particular -- from sales of those particular
- 11 transmissions.
- 12 THE COURT: All right. So that's explained
- 13 once, so you don't have to explain it again.
- 14 THE WITNESS: All right.
- THE COURT: All right. You can go ahead. 15
- 16 BY MR. OSTOYICH:
- 17 Your average but-for price in table 5, line 9, goes
- 18 from 3418 low in fiscal year '00 and fiscal year '01, up to
- 19 3776, and then it levels off at 3650; right?
- 20 A. That's correct.
- 21 Q. That's a net price?
- 22 Α. I'm sorry?
- 23 Q. That's a net price? You deducted out rebates to the
- 24 OEMs and you deducted out field incentives to the truck
- 25 buyers; is that correct?

42

#### DeRamus - cross

- 1 Α. Correct.
- 2 Q. Now, this table 5, you then in your Method 1, compare
- 3 to the table 6 values that you have for the average cost per
- 4 incremental transmissions sold, and then at table 7, the
- revenue minus the cost gives you your method one incremental
- 6 profits; is that right?
- 7 Correct, for that particular G-Platform line. I do a
- 8 similar calculation for the FreedomLine in the second part
- 9 of that table right below that.
- 10 Now, this average but-for net price, let's go, if we
- 11 could, to figure 18 on Page 84.
- 12 This figure 17 on Page 84, Dr. DeRamus, this is
- 13 a figure that you created. It's in your report; is that
- 14 riaht?
- 15 Α. That's correct.
- 16 Q. The black line here is Meritor's average price for its
- 17 Linehaul transmissions, the 9 and 10-speeds; is that right?
- 18 Yes, it is derived from an actual database of OEM
- 19 transactions, and we selected only 9 and 10 transmissions in
- 20 computing the but-for price -- I'm sorry -- in computing the
- 21 prices that are on -- in that table.
- 22 And these average Meritor prices for each year,
- 23 they're in the \$3,000 range for 9 and 10-speeds; is that
- 24 correct?
- 25 Α. That is correct.

#### DeRamus - cross

44

45

- The numbers are higher, but in doing the comparison,
- you have the potential of seriously misleading the Court as
- to the reliability of the numbers in table 5.
- 4 Dr. DeRamus, I will take care of that,
  - Now, this, your but-for price of 3418 up to 3776
- 6 and leveling off at 3650 is a net price, but this is a gross
- price for the OEMs; correct?
- 8 The net revenue, pre-revenue in table 5, is net of
- 9 all payments and additional -- including additional
- 10 aftermarket revenues applied across a different set of
- 11 products, and this is a price, the invoice price to the
- 12

15

- 13 Q. Right. You say up at the top -- this is your title:
- 14 Gross of Rebates and Incentives.
  - So you have not deducted for the rebates and
- 16 incentives; is that right?
- 17 That is my understanding of the data. Again, it
- is derived from a particular database that was provided 18
- 19 to us by both ZF Meritor and Eaton, and that was our
- 20 general understanding of how to interpret the net price in
- 21 that.
- 22 Q. The blue line in your figure 17 is Eaton's actual

and 10-speed transmissions.

That is correct.

That's correct.

- 23 price for 9 and 10-speed manual transmissions; is that
- 24 right?

2

5 Α.

6 Q.

8 Α.

9 Q.

10

11

12

13

14 Q.

15

16

17

18

19

20 Q.

25 Α. That is Eaton's actual price charged to the OEM for 9

DeRamus - cross

And as we see, it's for every year from 2000 on,

As you characterize in your report, it's about

Now, this is the gross price, and we know that there

Yes. There are rebates provided. My assumption is

It is based on the -- the representations that Eaton

gave us of the data was not always completely clear, but

And so if we net those out so we can compare this to

are some rebates that Eaton provides to the truck companies

It's your report. Do you know what it is? It says

four-and-a-half percent on average; is that correct?

when they purchase transmissions; right?

that those are gross of those rebates.

Is it aross?

that it was may understanding, yes.

it's a little bit lower than Meritor's actual prices for

the 9 and 10-speed transmissions; is that right?

43

# DeRamus - cross

- 1 All right. And you would agree with me, just as a
- 2 matter of math, your table 5, line 9 average but-for price
- 3 is in every year about 15-percent higher than the actual
- 4 price the company obtained for its 9 and 10-speed manuals;
- 5 is that correct?
- 6 I would agree with you as a matter of arithmetic,
- 7 but I agree with you as a matter of characterization of
- 8 those -- those two data points are in no way comparable,
- 9 as I said. These are derived from different data sources.
- 10 These are OEM transaction prices. The other one, the other
- 11 ones are total revenues, and those are -- in fact, there is
- 12 some period there where you can compare them in terms of
- 13 actuals to actuals.
- 14 There's -- part of my table 5 actually has 2000
- 15 actuals in there, and those actuals, what you refer to --
- 16 we've -- what's referred to in table 5 as a but-for price,
- 17 i.e., a but-for per unit revenue, you can see that is an
- 18 actual audit number that ties back to the audited
- 19 financials, and you can compare that to an actual OEM price
- 20 here. That tells you something about a difference in the
- 21 numbers, but they're not comparable data points.
- 22 Dr. DeRamus, I have not characterized anything yet.
- 23 I'm just asking you if the numbers are higher.
- 24 The numbers are higher; right? There's no
- question about that. 07/23/2009 12:14:13 PM

Q.

aross.

- 21 Yes. Because that was my understanding. Α.
- 22 Q. The net price -- the rebates to the OEMs are in the
- 23 range of 1 to 5 percent that Eaton provide; is that right?
- 24 Α. That is correct.
- 25 Page 42 to 45 of 125

#### DeRamus - cross

- 1 your but-for price, if we net out this, take about five
- 2 percent, a little bit under \$3,000, somewhere in the range
- 3 of 50, \$75 to \$150 less to the OEM; is that right?
- 4 A. As I said before, you can't do that comparison you are
- 5 trying to make, but you can certainly do the math of
- 6 applying the -- the rebates from -- to reduce that price
- 7 accordingly.
- 8 Q. So if we deduct out the rebates, Eaton's average
- 9 price for 9 and 10-speed manuals is somewhere in the 2700
- 10 range?
- 11 A. That's the math that applies.
- 12 Q. Eaton applies incentives, as does Meritor, to the
- 13 truck buyers themselves to incentivize them to specify
- 14 their transmissions; right?
- 15 A. That is correct.
- 16 Q. In fact, you've calculated in your report what the
- 17 average is that Eaton provided across this time period to
- 18 the truck buyers; is that right?
- 19 A. Correct. Both Eaton and ZF Meritor provided
- 20 incentives.
- 21 Q. And, on average, Eaton's SPIFFs -- they're called
- 22 SPIFFs; right?
- 23 A. That is one term, yes.
- 24 Q. And that's, on average, about \$450 of an additional
- 25 price incentive to the truck buyers?

#### DeRamus - cross

48

- 1 for the nines on tens on average in the table. And if we
- 2 take this and deduct it, we're down to about 2300 or so; is
- 3 that right?
- 4 A. That is what the math implies, yes.
- **5 Q.** That's a net price on average in 2001 for Eaton's
- 6 9 and 10-speed manual price, the transmissions; is that
- 7 right?
- 8 A. That's correct. Net price before any additional
- 9 aftermarket sales of revenues that Eaton may earn from
- 10 those.
- 11 Q. If we go back to figure 17 on Page 84, Eaton's net
- 12 actual price is about 2300 for 9 and 10-speed manual
- 13 transmissions in 2001. And you've got the actual prices
- 14 for ZF of 3,000; right?
- 15 A. Again, be careful, because we've not gone through the
- 16 same exercise of getting the competitive equalization
- 17 payments and deducted those from ZF Meritor's prices. And,
- 18 again, I would put a big caveat on making sure that the math
- 19 that we just did actually was a reflection of the \$450 per
- 20 unit applied to all units, which is so mething I would need
- 21 verified.
- 22 Q. But table 5, line 9, you've got the but-for net price
- 23 that you posit for ZF Meritor's transmissions on average of
- **24** 3418, 2001.

25

1 A.

Do you recall that? It's on Page 133.

47

# DeRamus - cross

- A. I would have to review my testimony to see what
- 2 specifically the average was. It was a range depending on
- 3 the size of the truck buyer and varied over time.
- 4 Q. Let's look at figure 28 on Page 113.
  - You plotted out Eaton's average incentives to
- 6 the truck buyers; right? Is that right, Dr. DeRamus?
- 7 A. Bear with me one minute.
- Yes, I'm there. Figure 28.
- **9 Q.** The black line is the average per unit SPIFF to all
- 10 truck purchasers; is that right?
- 11 A. Can you bear with me one minute?
- 12 Q. Sure.

5

- **13** (Pause.)
- 14 THE WITNESS: That is what the -- the title
- 15 says, but just to be clear, I don't recall whether this is
- 16 conditional on someone receiving a SPIFF versus the total
- 17 SPIFF divided by the total quantities.
- 18 BY MR. OSTOYICH:
- 19 Q. In the year 2001, you plotted out an average of
- 20 \$450 price concession to the truck buyers that Eaton
- 21 provided per unit; is that right?
- 22 A. That is correct.
- 23 Q. Now, if I take your figure 17, you said already we
- 24 deducted discounts or rebates to the truck buyer, the
- 25 truck manufacturers. You have another \$2,700 per unit price

49

- DeRamus cross

  I'm sorry. We're back to table 7 of my report?
- 2 Q. Table 5.
- 3 A. Table 5?
- 4 Q. Table 5, line 9.
- 5 A. With all the caveats that I expressed previously about
- 6 what that average but-for price means and how to interpret
- 7 that, yes.
- 8 Q. So you've got an average but-for net price is 3418
- 9 when the actual net price that Eaton was selling 9 and
- 10 10-speed manual transmissions in 2001 was in the 2300
- 11 range?
- 12 A. That's where I think you fall off the wagon, apples
- 13 and oranges, or apples and bicycles comparison. That
- 14 includes additional revenues from aftermarket sales that I
- 15 believe is appropriate to include in a damages calculation.
- 16 and it includes a different mix of products.
- 17 These are not just 9 and 10-speed transmissions.
- 18 These include transmissions with additional levels of
- 19 automation that cost more to make and that are sold for
- 20 higher prices as, well as in the forecast time period,
- 21 performance transmissions, such as 11-speed, 13, 14-speed
- 22 transmissions that also generally sell for higher prices and
- 23 cost more to make.
- **24 Q.** How many -- how many of those other transmissions
- 25 besides 9 and 10-speeds are in this column, fiscal year '01,

13 of 50 sheets

07/23/2009 12:14:13 PM

#### DeRamus - cross

1 Dr. DeRamus, in your but-for world?

2

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

1

10

I don't have a precise estimate of those. There are different projections that ZF Meritor provided where they provided greater levels of details of their assumptions regarding the different products that were coming out and when they were expected to come out.

Some of these are coming out during this 2001 and forward time period, so on the strategic business plan itself, the one line item that's separated is the aftermarket sales.

So you can see the additional revenues from the aftermarket sales, but it does not provide a break-out in what they call the G-Platform between 9-speed, 10-speeds, and everything else.

And I also emphasize that this is forecast based on -- it's not just specifically one price for all 9 and 10-speed transmissions. There's a mix of -- they're forecasting a particular mix on a going-forward basis. They're forecasting increased torque ratings, to accommodate

higher horsepower requirements.

So you may have expectations going forward of even 9 and 10-speed transmissions that are higher priced and higher cost that are not comparable to a given -another given table that just has 9 and 10-speed particular transmissions.

#### DeRamus - cross

52

53

- company business plan that was a proxy for the but-for
- world; is that right?
- 3 I used a company business plan, and I -- and with
- 4 certain adjustments, I concluded that it was reasonable to
- use the basis for some of my computations.
- 6 Now, the plan you use, and I will get to it in detail
- 7 in a moment, I promise, but the plan you use, you don't know
- 8 what assumptions the creator of that plan used in preparing
- 9 the plan, do you?
- 10 I know some of the assumptions. I don't know every
- 11 single assumption that they used, but I did verify the
- 12 reasonableness of the forecasts.
- 13 We have an assumption on an assumption; right?
- 14 You have an assumption that the plan is a proxy for your
- 15 but-for world and you have an assumption that they made
- 16 assumptions that are reasonable. You don't know all the
- 17 assumptions in the plan?

the question.

- 18 I'm not sure how to answer that question because
- 19 it's kind of -- I did not assume something about the --
- 20 the but-for world based on -- let me try that again.

21 You have many, many assumptions there. Let me 22 tell you what I did. Maybe that's the easiest way to answer 23

24 I looked at all the available information 25

to me. I looked at this particular business plan and I used

51

# DeRamus - cross

- Dr. DeRamus, I promise, I will get to that point
- in a minute. But this figure you have here, is it your 2
- 3 testimony that your but-for world, that you don't know
- how many of these other transmissions are in those figures?
- 5 Yes. I have the -- reviewed all the information that 6 was available to me about this business plan and previous
- 7 business plans.

8 It did not provide the details of the individual

9 units of each product in this -- accompanying this

- November 2006 -- I'm sorry -- November 2000 business plan.
- 11 Prior business plans did have more explicit information
- about the torque rating, projected torque ratings, the dates 12
- of introductions of alternative business -- of alternative 13 14 products.
- 15 What it did have was -- I note that in those
- 16 projections, there are additional transmissions. We see it
- 17 from the capital expenditure forecasts that are included as
- 18 part of the business plan.
- 19 Let me see if I can break this -- first, this is
- 20 your but-for world up here. You created it, but you can't
- 21 tell me how many other transmissions are in there; is that
- 22 right?
- 23 Α. My estimate of the but-for world based on all the data
- 24 that's available to me.
  - So what you did was you assumed that there was a

# DeRamus - cross

- all of the information I had about the way in which this was
- 2 developed, who presented it. Certain assumptions in that
- 3 business plan are very explicit and easily calculable.
- Other ones are not. Other others are buried in the details
- 5 of the spread sheets of the individuals who prepared these.
- 6 I did verify the procedures against other business plans
- 7 where they were more explicit.
  - So it's not simply taking without any
- 9 underlying analysis, taking the numbers at face value. I
- 10 did a very extensive analysis to verify the reasonableness
- 11 and the reliability of the numbers in that business plan,
- 12
- particularly as I applied and modified them for purposes of
- 13 my damages calculation.
- 14 Now, Dr. DeRamus, is it your testimony that the plan
- 15 that you relied upon and assumed was the basis of the
- 16 but-for world here, that the plan included transmissions
- 17 other than 9 and 10-speeds for fiscal year '01?
- 18 Yes. That is my understanding based on the
- 19 information that I've seen.
- 20 You relied upon as part of your report a president's
- 21 report that was prepared in October of 2000; right? Do you
- 22 remember that?
- 23 I relied on president's reports that were prepared
- throughout this time period, including the October 2000 24
- 25 president's reports, or the -- the presentation to the Board

8

54 56 DeRamus - cross DeRamus - cross 1 of Directors as well as this. that is the -- the table says New Product Timetable. It 2 MR. OSTOYICH: Your Honor, if I could, I would wasn't particularly clear to me when the volumes are like to hand the witness a copy and bring your Honor a copy expected to go into the forecast. as well, and I have an extra copy (handing documents to the This is for a new product introduction. They were 5 Court and the witness). reintroduced in fiscal year 2001; right? We know that 6 THE COURT: Thank you. 6 much; right? It exists in fiscal year '02 or afterwards; 7 BY MR. OSTOYICH: 7 right? 8 Now, Dr. DeRamus, do you recognize this from your, 8 A. There, you are making an assumption about what 9 deposition, president's report, which you relied upon in 9 introduction means, because there are pre-releases that 10 preparing your report? 10 occur, testing models. I don't know how they accounted for 11 Α. Yes, I do. those in terms of the revenues. 11 12 12 And this was a president's report. At the top of the Yes, the table does say October 2001 was a -- as 13 first page, it says it was prepared in October of 2000; 13 part of the timetable. 14 right? 14 I don't want to suggest that they are not available in 15 A. Correct. fiscal year '01, which was the prior year; right? 15 16 Q. 16 And you relied upon this in looking at your report, in Α. Unless there were some pre-release production numbers 17 preparing your report; is that right? 17 included in that. 18 Correct. 18 So if we go back to table 5, line 9, for fiscal year 19 Q. Now, this has a page that ends with 477, are the last 19 '01, your average price figure of 3418, which is the net 20 20 three digits. Let's me know when you've gotten there. price, is 9 and 10-speed manual transmissions almost 21 It should say up at the top, New Product 21 entirely; is that right? 22 Timetable. 22 There is a large faction of, they're G-Platform sales 23 Do you see where I am, Dr. DeRamus? 23 that are going to be 9 and 10-speed transmissions. There 24 A. 24 Yes, I do see where you are. It's -will also be additional levels of automation, so the 25 Q. 25 All right. This has a table, a timetable for when transmissions that are sold at that level automation will 55 57 DeRamus - cross DeRamus - cross some other products, the manual products that are going to 1 be higher. 2 be developed by the company -- do you see that on the It wasn't clear to me whether, when they were 3 left-hand side? 3 redoing this particular forecast, what they actually -- like 4 A. I do. I said, I don't have the individual spread sheets that 5 Q. All right. Now, the company is on a fiscal year; is go in and say on a product line by product line basis, how 6 that right? many additional, or performance application transmissions 7 A. they were projecting in 2001 in this particular business 7 8 And a fiscal year runs from October 1, one calendar 8 9 year, to September 30th of the next year; is that right? 9 I'm not asking you the fact question about what the 10 A. 10 That's correct. company was predicting. Now I'm asking you what's in your 11 Q. Now, fiscal year '01, which is the column I was just 11 but-for world? 12 12 looking at in your table 5, that runs from October 2000 to Your but-for world. I thought you said you 13 September 30th, 2001? 13 assumed other transmissions besides nines and tens of fiscal 14 A. Correct. 14 year '01 to gets to this average price of 3418. 15 15 Now, these product introductions here, this is what I expect that ZF Meritor included additional 16 you were talking about? You said these were in the column 16 transmissions other than simply 9 and 10-speed manual 17 17 for fiscal year '01; right? These products? transmissions. 18 Those, among others. I also mentioned the additional 18 Q. How many? How many and what kind? 19 automation of the ESS, the Sure Shift product that was 19 And that's where I said, all of the information that 20 20 released prior to this time period. is available to me does not -- and it's available to 21 These all say they are being developed after fiscal 21 estimate damages in this case, does not provide me with the 22 year 2001. This is the first one, and it's fiscal year 22 precise number of units by product type that are included in 23 2002; right? 23 24 24 The exact timing of the sale was not particularly All I know is in the -- comparing it to previous 25 clear to me. There's preproduction time periods, so they --25 plans, it appears that there are a -- there are levels of

#### DeRamus - cross

- automation, additional types of products with additional
- 2 levels of automation that would cause that price to go up.
- 3 There are, as I said, aftermarket revenues that would also
- 4 cause it to go up. But that would also correspondingly
- 5 cause the cost to go up as well.
- 6 Q. So am I right, Dr. DeRamus, you don't know how many
- 7 other products are in there, or what the volume of those
- 8 products are?
- **9** Do you know what the price assumptions in your
- 10 but-for world, table 5, line 9, those other unknown quantity
- 11 of transmissions are going to sell for?
- 12 A. Again, I don't have the underlying -- the spread
- 13 sheets. I have what is the implied revenue per unit
- 14 sold, which is ultimately only a parameter of interest to me
- 15 in the damage calculation, the only parameter that you need
- 16 for purposes of the damages calculation.
  - I have looked at other business plans, as I
- 18 said, where they were more explicit and where it gives me a
- 19 sense of the prices that were being charged for the
- 20 transmissions, the higher level of automation, and for the
- 21 performance application transmissions, and those were
- 22 higher-priced products than the 9 and 10-speed
- 23 transmissions.

17

- 24 And it also showed me, again, the evolution of
- 25 the -- of their expectations of the torque requirements

#### DeRamus - cross

60

61

- 1 costs in table 6 to get your table 7, incremental profits,
- 2 and that is your Method 1?
- 3 A. The variable costs that are commensurate with
- 4 the -- whatever product, specific product is underlying the
- 5 aggregate numbers that are reports in table 1.
- 6 Q. Now, your Method 2 -- did you prepare this, by the
- 7 way?
- 8 A. No, I did not.
- 9 Q. All right. The second page -- I think it's the third
- 10 Pages in. The third page in says you calculated lost
- 11 profits five different ways.
- 12 Do you see where I am?
- 13 A. Yes.
- 14 Q. Now, there are not five independent ways, are they,
- 15 Dr. DeRamus?
- 16 A. No. As I said, there is one method, which is --
- 17 damages, which is lost -- lost profits plus lost enterprise
- 18 value. That is the overarching method, and there are
- 19 various approaches I took using different data, and,
- 20 frankly, all of the data that was available to me to come up
- 21 with a reliable estimate.
- 22 Q. Your second method you said was an econometric measure
- 23 of the market share. Is that fair?
- 24 A. That is correct.
- 25 Q. And in that method, let's look at table 8 on Page

59

# DeRamus - cross

- even for just their 9 and 10-speed transmissions, which may
- 2 be different than their -- than their actuals, but, again,
- 3 provides you an apples-to-apples comparison if you are
- 4 looking at revenues versus costs.
- **5 Q.** Now, the assumption you made in the but-for world that
- 6 some number of transmissions, some different types of
- 7 transmissions would sell on average for 3418 net, right,
- 8 that was your assumption?
- 9 A. Again, with all the caveats that I just said before, I
- 10 don't want to try the courts patience, but it is not just --
- 11 that is the net revenue that they would receive divided by
- 12 the total number of transmissions
- 13 Q. That's the average but-for price. That's what you
- 14 wrote on line 9, table 5?
- 15 A. That is the figure that is listed as average but-for
- 16 price on line 9.
- 17 Q. Now, for your Method 1, you take this and you multiply
- 18 it by the additional units you think they sell of whatever
- 19 those transmissions are that you can't identify; is that
- 20 right? Right?
- 21 A. I multiply it by the additional incremental -- the
- 22 total incremental units for that particular platform,
- 23 the G-Platform transmission, just as I do below the
- 24 FreedomLine.
- **Q5** Q. And then you subtract out the incremental variable 07/23/2009 12:14:13 PM

# DeRamus - cross

- 1 145.
- 2 A. Yes.
- 3 Q. Now, this is your calculation of the incremental
- 4 profit under your Method 2, the econometric measure of
- 5 market share?
- 6 A. That's correct.
- 7 Q. You did a separate econometric measure of what you
- 8 think they would have sold the volume, the market share of
- 9 the volume they would have sold --
- 10 A. That's correct.
- 11 Q. -- in the but-for world?
- 12 And then you measured it by, you multiplied it
- 13 to get your profit, or you multiplied it by the profit
- 14 figures in table 7, your first method; is that correct?
- 15 A. Correct. As I mentioned before, I could have easily
- 16 used alternative measures of profit. It would have given me
- 17 the same results.
- 18 Q. The second method is premised upon the assumption that
- 19 the but-for pricing and the but-for variable cost and the
- 20 but-for profit of the first measure are reasonable; is that
- 21 right?
- 22 A. It's premised on the figures that are included in
- 23 the first measure and on the overarching assumption that,
- 24 yes, the per-unit profit is a reasonable measure of per-unit
- 25 profit.

#### DeRamus - cross

- 1 Q. Now, the third method was you added some additional
- 2 costs after your fiscal '03. Is that fair?
- That's correct.
- 4 Q. And if we can turn to table 10 on Page 145. 145.
- 5 A.
- 6 Q. That's the next page, table 10.
- 7 Table 10. This is the calculation of the
- 8 incremental profit in your third method for lost profits;
- 9 right?
- 10 Α. That's correct.
- 11 And line one, you have the incremental gross profit in
- 12 current dollars. And that comes out of -- straight out of
- 13 table 7 in Method 1?
- 14 Α. Correct.
- 15 Q. And that's from table 7, line 3, in Method 1?
- 16 That's correct. I'm sorry. I'm not
- 17 cross-referencing, but that's correct based on my memory.
- 18 Table 7, line 3 comes out of --
- 19 Α.
- 20 Q. -- in part line 21 from table 5, your first method?
- 21 I'm sorry? Table 7 is ultimately derived from table
- 22 5 and 6.
- 23 Q. Therefore, it depends upon your but-for price
- 24 assumptions in table 5, line 9; is that right?
- 25 It depends on the consistency of the assumptions in

#### DeRamus - cross

- are also aggregating up across both the FreedomLine and
- the EG Platform. It's not simply the EG Platform numbers
- 3 here.
- 4 O. In part, it comes from table 5, line 9?
- A. Correct.
- 6 Then you had a fifth lost profits calculation, and
- 7 that's the one you said in your -- this handout here, Eaton
- 8 operating profit benchmark; right?
- 9 Α. Correct.
- 10 And that is an assessment you made that the company in Q.
- 11 the but-for world, the plaintiffs would have earned an
- 12 operating profit based upon Eaton's operating profit in the
- 13 actual world?
- 14 I would say more or less. It is -- and significant
- 15 differences in terms of how you think about the assumptions
- 16 that are there in terms of the results.
- 17 It is an alternative source of data. It's
- 18 Eaton's actual profits as opposed to forecast profit. But I
- 19 don't necessarily derive -- I don't add back in the losses
- 20 that ZF Meritor actually incurred during this time period,
- 21 so that effectively, in the but-for world, the damage line
- 22 there is not their but-for profit. Their but-for profits is
- 23 the sum of the damages there, 200 -- I think it's
- 24 approximately \$250 million.
- 25 Bear with me. I will get the exact number.

63

# DeRamus - cross

- table one, table 5 and table 6 of prices and costs.
- 2 Now, your Method 4 even added some additional
- 3 incremental costs in from fiscal year 2000 up to 2009; is
- that right?
- 5 Α. Correct.
- 6 Q. And the incremental revenue figures, again, come out
- 7 of table 7; right?
- 8 That is correct, yes.
- 9 So on table 11, which is Page 147, it's a little hard
- 10 to read, but table 11, line 1, comes right out of table 7;
- 11 is that right? Line 3 in table 7?
- 12 Α. I'm sorry. Table 11, line?
- 13 Q. Table 11, line 1, incremental gross profit in current
- 14 dollars.
- Α. 15 Yes.
- 16 Q. It comes from table 7, line 3?
- 17 Α. Yes, that's correct.
- 18 Q. And that depends upon the incremental revenue figure
- 19 on line one of table 7; is that right?
- 20 Α. The -- yes. Yes. Incremental revenue and incremental
- 21 costs, both.

17 of 50 sheets

- 22 And that line comes out of, in part, table 5, line 9
- 23 price assumptions automatically; right?
- Well, again, I think it's appropriate to emphasize,

- 25
- because we never did talk about the FreedomLine, and these

65

64

# DeRamus - cross

- Less approximately 80 to \$90 million of losses. So that
- would have been their -- their actual but-for profitability,
- 3 would be well less than \$200 million.
- 4 Can we bring up table 12 on Page 147?
  - This is your fifth method that summarizes the
- fifth method based upon Eaton's operating profit, which you
- 7 calculated the company's but-for profitability; is that
- 8 right?

5

- 9 A. Yes.
- 10 And table 12, line one, says, Eaton's profits from
- 11 heavy duty transmissions, all product types.
- 12 Is that right?
- 13 Α. Correct.
- 14 And then in line 2, you multiplied that out by a ratio
- 15 of Linehauls just to get the Linehaul profits; is that
- 16 right?
- 17 Right. I measured that I -- a procedure that I
- 18 felt was going to provide a lower bound estimate, since I
- do expect ZF Meritor to have sold some performance 19
- 20 transmissions as well in the but-for world. But, yes,
- 21 that provides a lower --
- 22 This number in Dr. DeRamus' line 2, Eaton's profits
- 23 in Linehaul, you define as the Linehaul market, is, in
- 24 your view, a monopolistically high profit margin; is that
- 25 Page 62 to 65 of 125

07/23/2009 12:14:13 PM

#### DeRamus - cross

- 1 A. Yes, I believe they are earning monopoly profits.
- 2 Q. And, in fact, you have a section of your report,
- 3 Section 6.6, that says you can infer monopoly power in the
- 4 Linehaul segment of the market from the high profits Eaton
- earned; right?
- 6 A. Correct.
- 7 Q. And in this method, you're assuming ZF Meritor, in the
- 8 but-for world, where profitability based, upon that Linehaul
- 9 profit figure?
- 10 A. Not exactly. That's where -- the not exactly can be
- 11 significant in terms of dollars because I did not take out
- 12 the losses that ZF Meritor incurred in that time period.
- 13 So the actual profits that Eaton's -- that ZF
- 14 Meritor would have incurred in the but-for world using this
- 15 methodology is that number, the number on line 8, and then
- 16 add in the losses they incurred during the end of the year,
- 17 and that would, in turn, be the actual but-for profitability
- 18 of ZF Meritor.
- 19 Q. But for this purpose, you took Eaton's profits,
- 20 monopolistically high profits Eaton earned in the Linehaul
- 21 segment of the market, multiplied them out by the
- 22 incremental units they would have sold, to get the figure
- 23 down at the bottom on line 9?
- 24 A. That's correct. There's an input into the
- 25 calculations.

1

#### DeRamus - cross

- 1 and the Linehaul profits as opposed to the higher Eaton
- 2 performance profits as the benchmark, and instead of putting
- 3 in Eaton's performance transmissions in the denominator for
- 4 estimating ZF Meritor's but-for shares.
- 5 Q. All right. Can you slide this this way so we can get
- 6 fiscal years '04, '05, '06 and '07 here?
- 7 So I'm clear again, these are your words, table
- 8 12, line 5: ZF Meritor's but-for share of the Linehaul
- 9 market. It's 43 percent, 57 percent. Ultimately, it's
- 10 60 percent of your you but-for world; right?
- 11 A. Those are the percentages that are on that spread
- 12 sheet, but, again, as we discussed in my deposition, I
- 13 wouldn't characterize those too narrowly as necessarily
- 14 reflecting my view that they would have only sold Linehaul
- 15 transmissions.
- **16 Q.** I'm taking your words and the table you prepared. All
- 17 right? That's what it says.
- 18 A. Those are the numbers and the words in that table.
- 19 That's correct.
- 20 Q. Table 13 on the next page. This is your summary of
- 21 all five of your lost profits calculations; is that
- 22 right?
- 23 A. That's correct.
- 24 Q. This one down here is the one we just looked at.
- 25 This is ZF Meritor's lost profits based upon Eaton's

67

# DeRamus - cross

- Q. And you assume in this model of the but-for world,
- 2 which is the more competitive world; right? Right?
- 3 A. Yes, it is.
- 4 Q. You assume that ZF Meritor would have obtained 50,
- **5** 60 percent of the Linehaul portion of the market?
- 6 A. Well, I think that's where there's a distinction
- 7 between dividing a number by the total Linehaul number
- 8 versus what I actually expect would have happened in the
- 9 but-for world.
- 10 I do expect approximate -- ZF Meritor would have
- 11 had approximately 50 percent of the Linehaul market and some
- 12 percentage of the performance market as well.
- 13 Q. Just reading your table, table 12, line 5, that's
- 14 what you posit that ZF Meritor's, a share of the Linehaul
- 15 market?
- 16 A. Those are the words I used. Just to be clear, there's
- 17 one thing that you do for exposition, for ease of
- 18 exposition, I think in terms of what you do for explaining
- 19 what is underlying the data and underlying the conclusions.
- 20 I do consider that Eaton's -- I'm sorry -- ZF
- 21 Meritor's but-for units would have been comprised of both
- 22 performance and Linehaul transmissions for expositional
- 23 use.
- 24 And in order, frankly, to provide a lower
- 25 estimate of damages, I'm using just the Linehaul percentages

69

68

# DeRamus - cross

- 1 monopoly level operating profits; right?
- 2 A. It is the -- one is based on an allocation of Eaton's
- 3 profitability.
- 4 Q. You have about \$245,000,000 worth of profits for the
- 5 period '00 to 09 under that method, and based upon a
- 6 monopolistically high Linehaul profitability; right?
- 7 A. Not of those are damages on profits. The damage on
- 8 profits would be 248 less orders of magnitude, probably 80
- 9 or \$90 million. So that would be 160, \$170 million,
- 10 depending on how you do that.
- 11 Q. Yes, but your Methods 1 and 2 are somewhere in the
- 12 range of 75-percent higher than the monopolistically high
- 13 level of profits in table 12; right?
- 14 A. Those estimates are higher. Again, they're damage
- 15 estimates because for damages calculation, the question is
- 16 ultimately, what is the incremental sales that --
- 17 incremental profits that ZF Meritor would have earned, not
- 18 necessarily a representation of P&L that ZF Meritor would
- 19 have had.
- 20 Q. I'm looking at your table. The first two lines, you
- 21 have lost profits of somewhere in the \$400 million range for
- 22 that period?
- 23 A. Correct. And that is --
- **24 Q.** \$384,991,000?
- **25 Q.** I'm sorry?

#### DeRamus - cross

- Q. 1 \$384,991,000?
- 2 That is correct. In present value terms -- you are
- pointing to the risk-free rate in present value terms.
- 4 That's not quite double. It's about 60-percent
- 5 higher than the monopoly level profits in your Method 5;
- 6 right?
- 7 It's significantly higher, the damages on the first
- 8 two are significantly higher than the damages in the Method
- 9 5. Method 5 is the median method. It's between the two
- 10 high estimates and the two low estimates.
- 11 I want to go now to your enterprise value calculation,
- 12 if we could. And if we could look -- first, tell me,
- 13 enterprise value, the way I understand your report,
- 14 enterprise value is the fair market value someone would pay
- for a business at a given point in time. Is that a fair way 15
- 16 of thinking of it?
- 17 It's a fair way of characterizing it, yes.
- 18 Q. And that depends in part upon how profitable the
- 19 business is; is that right?
- 20 Α. That is correct.
- That depends in part on how profitable you think the 21 Q.
- 22 business will be; right?
- 23 Α. Correct.
- 24 Q. And when you calculate an enterprise value, your
- 25 enterprise value assumed two different measures of

#### DeRamus - cross

- 1 And you say, looking at what someone paid for this
- 2 business, the lost enterprise value measured as of
- February 2009; right?
- That's correct.
- 5 Q. And you're looking at February 2009, when what a buyer
- would pay for a business. You looked at the profit figures
- 7 from ZF Meritor in your but-for world from a different time
- period; is that right?
- 9 Well, to be clear, I'm trying to get an estimate of
- 10 the equitable value of the business as of 2009. There is
- 11 an issue when anyone is doing any kind of valuation, what
- 12 time period you are using or what the base period you are
- 13 using for profits and how you apply discounts rate and so
- 14 forth and the time period of the multiples from as well.
- 15 I did use 2006 to 2008 as the average time 16
- period for the lost profits as the benchmark for the 17
- going-forward estimate of ZF Meritor's profitability on a
- 18 going-forward basis.
- 19 Dr. DeRamus, you agree with me, right, that this is a
- 20 cyclical industry?
- 21 Α. That's correct.
- 22 Q. And you would agree with me that the last nine months
- 23 of the auto industry has seen a downturn in this cycle;
- 24 fair?

71

25 A. That's correct.

73

72

# DeRamus - cross

- 1 profitability for the joint ventures of ZF Meritor; is that
- 2 right?
- 3 I did the -- the computation of the enterprise value
- 4 based on two measures of ZF Meritor -- yes. ZF Meritor
- 5 but-for profitability.
- 6 One was based upon table 11 and the other was based
- 7 upon table 12; right?
- 8 Α. That's correct.
- 9 Q. And you were looking at your for enterprise value
- 10 purposes, what someone would pay for that business, assuming
- 11 it had earned those profits, as of February 2009, when you
- 12 submitted your report; right?
- 13 Effectively, I would say that's the -- for the purpose
- 14 of the exercise is to determine the fair market value, the
- 15 value of the enterprise as of the date of my report.
- Whether it's -- the computation is done at some alternative 16
- 17 date, my but-for world is not one in which I'm assuming
- 18 ZF Meritor would have been on the block or up for sale in
- February 2009. Simply that happens to be the date of my 19
- 20 report.
- 21 Well, let's look at Paragraph 306 of your report on
- 22 Page 36. Paragraph 306. Let's blow this up down here.
- 23 This is your description of your enterprise
- value methodology; is that right? 24
- That's correct.

- DeRamus cross
- 1 Now, rather than measure what someone would pay for
- the business in February 2009, in looking at the underlying
- profitability during a downturn, you chose to look at
- 4 ZF Meritor profitability from '06 to '08; right?
- 5 That's, again, where I disagree with the way
- 6 you're characterizing the premise of the analysis. Not
- 7 necessarily an assumption in the but-for world in which,
- 8 magically, ZF Meritor would have been sold to another buver
- 9 and forced to sell on a particular date that happened to
- 10 correspond -- that happened to correspond to the low points
- 11 of market valuation, the extreme point of financial market
- 12 dislocations and having else.
- 13 It is a valuation done as of a particular time,
- 14 using all of the information that is available to the 15 individual who is doing the valuation, which I believe is
- 16 the appropriate way to form the analysis.
- 17 Dr. DeRamus, bear with me. I'm not characterizing;
- 18 I'm simply asking you dates.
- 19 You are measuring it as of February 2009, what
- 20 someone would pay for that business, but you lacked at the
- 21 profits for the underlying business as of 2006 to 2008, not
- 22 to 2009; right?
- 23 I measured the expected value as of 2009 and I
- 24 used the profits from the -- the but-for profits from 2006
- 25 to 2008.

Page 70 to 73 of 125

#### DeRamus - cross

- 1 Q. And then you looked at what someone would pay
- 2 for comparable businesses, ArvinMeritor, and some others;
- 3 right?
- 4 A. That's correct.
- 5 Q. And you didn't look at what someone would pay for
- 6 those comparable businesses in February 2009; right?
- 7 A. No, because I did not feel that was appropriate.
- 8 Q. You looked at what someone would pay for those
- 9 businesses several years earlier; is that right?
- 10 A. I looked at all of the -- the most recent three-year
- 11 time period for which I have complete information for the
- 12 publicly traded companies, which was 2005 to 2007.
- 13 Q. And Appendix E lays this all out. You chose the time
- 14 period for your comparable businesses, you chose 2005 to
- 15 2007, for all of them; right?
- 16 A. That's correct, because that was the most recent
- 17 three-year time period of information available to me.
- **18 Q.** And the enterprise value, what someone would pay for
- 19 those businesses, is, in part, determined by the stock price
- 20 of those companies at that time; is that right?
- 21 A. Well, the valuations that are derived from this
- 22 approach certainly are affected by the stock market prices
- 23 during this time period, yes.
- 24 Q. All right. Appendix E and tables 20 and 21, you set
- 25 out the time period you are looking at for those comparable

#### DeRamus - cross

76

77

- 1 A. The valuation -- the estimate of the valuation as
- 2 of 2009 and with any estimate of valuation, the question
- 3 is whether the -- a question in terms of what is the
- 4 benchmark time period to use. And as even the guidelines,
- 5 your own experts have cited, it's appropriate to take into
- 6 consideration the I.R.S. revenue guidelines on something
- 7 completely unrelated, I might add. But they still cited the
  - need to take into account five years of financials to -- you
- 9 need to account for fluctuations in the market.
- 10 Certainly, if there's a major market dislocation
- 11 in February 2009, you would not use that as a basis for
- 12 an equitable value of what is the but-for enterprise
- 13 value.
- 14 Q. Dr. DeRamus, if I put my house on the market tomorrow,
- 15 I look at comparables, what my neighbors were selling
- 16 their houses for as of this time period; right? It makes
- 17 sense?
- 18 A. If you are forced to sell your house and you decide
- 19 you want to sell your house at that particular time, you may
- 20 also decide you want to wait until the market recovers some
- 21 semblance of normalcy.
- 22 Q. I'm assuming I put my house on the market tomorrow, so
- 23 I look at comparable houses in my neighborhood, what value
- 24 people were paying for those houses tomorrow or some time
- 25 contemporaneously; is that right?

75

# DeRamus - cross

- businesses in '05 to '07; right?
- 2 A. Correct.
- 3 Q. And in table 19, you point out that you are looking in
- 4 part at the stock price of those companies back in '05 and
- 5 '07; right?
- 6 A. Yes. I'm not there in my report, but that sounds
- 7 correct.
- 8 Q. Do you want to look it up?
- 9 A. No, that's okay.
- 10 Q. Now, this, in February of '09, the market obviously
- 11 is lower than it was three or four years ago; is that
- 12 correct?
- 13 A. That's correct.
- 14 Q. But you have not brought any scenarios using the
- 15 values for your comparable companies, the lost enterprise
- 16 value measured as of February of '09, did you?
- 17 A. No. That would be inappropriate.
- 18 Q. But you say it's inappropriate, Dr. DeRamus. You say
- 19 it was measured as of February '09. That's what you wrote;
- 20 right?
- 21 A. That is correct.
- 22 Q. Did you write that?
- 23 A. I did write that.
- 24 Q. You said it was measured as of '09, February of '09;
- **25** right?

DeRamus - cross

- 1 A. That might be how you do it. This is not a process
- 2 of valuing your house. This is valuing a going concern
- 3 value of a business that has future cash flows, a revenue-
- 4 generating business, a profit-generating business in a
- 5 but-for world. Very different than your, the way in which
- 6 you -- considerations you might have about selling your
- 7 house.
- **8 Q.** I could look back and pick a figure from my neighbors'
- 9 houses from three or four years ago at the height of the
- 10 market; is that right? Right?
- 11 A. You could always do that if you like, yes.
- 12 Q. But that would not tell me what the buyer is willing
- 13 to pay as of today, would it?
- 14 A. In the housing market, that would not give you the
- 15 view of what the housing market would be willing to pay.
- 16 Q. It's no different than --
- 17 A. It's very different in this. You are absolutely
- 18 mixing, again, apples-to-bicycles comparison. This is a
- 19 valuation of a business. Businesses recognize when there
- 20 are severe market dislocations. Sellers recognize it.
- 21 When there are capital constraints, the low
- 22 market valuations may reflect concerns of liquidity. A
- 23 whole host of issues that are not captured in your --
- 24 Q. I just want to make sure, your testimony is, it's
- 25 appropriate to determine a business in the automobile --

78 80 DeRamus - cross DeRamus - cross auto industry by looking at valuations from three years 1 Other than adjusting for the total Class A truck, all 2 2 the other figures from your but-for world come from here, 3 Is that your testimony? 3 don't they? It is my testimony that using the -- the 2006 to 2008 I believe we went through various iterations of my 5 time period for ZF Meritor's but-for operating profits, 5 calculation. The econometric model is based on the 6 but-for profits, is reasonable, and it's reasonable to use different set of data. Eaton's profitability is based on a 7 the valuations from a 2005/2007 time period. 7 different set of data. So there are different data sources 8 Dr. DeRamus, I want to go back to the plan. Your that I'm using. And, again, I look to see all of the 9 figures if your but-for world, your but-for pricing available -- the information that was available. I chose 10 assumptions and your but-for volumes and so forth, they 10 the information I felt was the most reliable. 11 come from the November strategic business plan; right? 11 To be clear about this, your econometric model is a 12 12 Again, some of them, some of the inputs from the different measure of the market share, but the but-for 13 calculation come from that strategic business plan. 13 pricing, the but-for profitability, comes from this; is that 14 MR. OSTOYICH: Your Honor, I don't know if you 14 right? 15 have a copy of that. 15 A. For four of the five methods, the pre-units profit is 16 May I bring you a copy? 16 effectively derived from this sheet, and again it's verified 17 THE COURT: Yes. 17 against other source of information. MR. OSTOYICH: You do have it? 18 18 The methods 1, 2, 3 and 4, the but-for price 19 THE COURT: No. Please bring me one. 19 assumptions all come from this document? 20 MR. OSTOYICH: I can bring one up. 20 The tables -- I think there's a table 5, yes, that 21 THE COURT: I mean, I'm sure I have one, but it 21 came from this particular document. 22 would be helpful to have. 22 And this particular document, you don't know who 23 (Pause.) 23 prepared this; right? 24 MR. OSTOYICH: Can I bring it up, your Honor? 24 I know it was presented by the president of the 25 THE COURT: Yes. 25 company. It was sent by the president of the company, or 79 81 DeRamus - cross DeRamus - cross (Mr. Ostoyich handed an exhibit to the Court and 1 Martello, to the Board of Directors. 2 the witness.) 2 It was reviewed and presented and developed at 3 THE COURT: Thank you. 3 the request of the Board of Directors, so it's not just 4 MR. OSTOYICH: You're welcome. 4 prepared by someone who is completely unknown to me. I've 5 BY MR. OSTOYICH: know who reviewed it. 6 Q. These figures, this document, this is where you You don't know the assumptions that the person 7 determined the but-for price for the manual transmissions on 7 who prepared this used for price and volume; is that 8 table 5, line 9; is that right? 8 right? 9 Α. The number that I -- I got the -- the figure on table 9 I know some of the assumptions they use. I know on an 10 5. Correct. 10 aggregate in terms of what their net revenue per unit was 11 In other words, you did not do an independent 11 across both the G-Platform and, again, which encompassed 12 determination of the but-for price for the manual 12 some automation and sales of transmissions with automation 13 transmissions. You took it from here? 13 included, such as the ESS and Sure Shift. 14 Α. That's correct. 14 So I do know, I do have information about some 15 And you did not do an independent assessment of the 15 of their assumptions. I don't have all of their 16 but-for price for the FreedomLine transmissions. You took 16 assumptions. 17 that from here as well; is that right? 17 Let's go to Page 4 of this. 18 Α. That's correct. 18 Page 4 is the table you took a number of your 19 Q. And for the volume of the transmissions, you took that 19 but-for assumptions from; right? 20 from here as well? 20 That is correct. Table 4 is one source of 21 Well, the -- as an input into computing the but-for 21 information. 22 market shares, I took the actual -- the -- I applied the 22 Bear with me one minute. 23 but-for, the implied estimate of the -- of ZF Meritor's 23 (Pause.) 24 market share by the actual number of truck builds in the 24 THE WITNESS: I would say table -- Page 4 and 25 market. 25 Page 7 as well.

DeRamus - cross

82

#### 1 BY MR. OSTOYICH:

- 2 Now, Page 4, I'm not going to ask you specific
- 3 numbers, because they're hard to read. But the price
- 4 assumptions that you use in table 5, line 9, for your
- 5 G-Platform, come from taking a figure up here, in units.
- 6 dividing by the revenue figure?
- 7 A. Yes. Dividing it by the net sales figures.
- 8 Q. Net sales figures. Deducted out the discounts.
- 9 Α. And added in aftermarket sales.
- 10 Q. Why did the person who prepared the plan you relied
- 11 upon assume the revenue data in '01? Why did they derive
- 12 that?
- 13 Α. I'm not quite understanding the question.
- 14 Let's go numbers. And I'm wondering how the person
- 15 who prepared the plan you relied upon chose to put this
- 16 number here and this number there? What assumptions did
- 17 they make?
- 18 Α. I would expect it was done -- it was done under the
- 19 direction of the CFO and the president of the company.
- 20 I don't know the specific assumptions that went into that.
- 21 I know that there are -- and we've tied it to the overall
- 22 markets, volumes, change in the overall markets. So it
- 23 is based on their expectation, based on their past
- 24 experience, of how they perform on that -- on a going
  - forward basis, but I don't have a specific estimate. And I

#### DeRamus - cross

84

- direction, the changes they made. I don't know the
- specific inputs into the spread sheets underlying the
- 3 competition.
- I understand I know the process. I know the numbers
- 5 they chose.
- 6 What assumptions did they make in picking any
- 7 particular set of numbers?
- 8 They made an assumption about the decline in the
- 9 total market based on what was going on in the market in
- 10 this time period. They made assumptions about the decline
- 11 in their particular share based on other factors that were
- 12 going on with regard to some perceptions in the industry,
- 13 the quality of some of their products. They revised it
- 14 downward to account for that. They revised it to account
  - for Ryder having the significant reduction in their volume
- 16 of sales.

15

- 17 There were other plans where they talked about
- 18 various factors and the number of transmissions that they
- 19 were going to be losing as a result of various factors
- 20 going on in the market, and those are the factors that  ${\bf I}$
- understand had been taken into consideration in preparing 21
- 22 this specific business plan.
- 23 The specific numbers, like 19,348 assume units of
- 24 G-Platform manual transmissions, how did they get that
- 25 particular number?

# DeRamus - cross

- know how they revised it. That's the table, Page 7 of that
- 2 same presentation, shows how they revised it downward
- 3 specifically, the specific request.
- 4 What about the volume assumptions that you took? The
- 5 volume assumptions for the FreedomLine came out of this
- 6 plan; right?
- 7 That's correct. Again, the volume assumptions that we
- 8 use to derive a market share estimate, which is then applied
- 9 to actual volumes.
- 10 Why did the person who prepared this plan assume 3400
- 11 FreedomLine units would be sold in fiscal year '01?
- 12 I don't know the specific reasons why they came up
- with those assumptions. I do know why they changed them. 13
- 14 I know why they reduced those volume assumptions
- 15 significantly, as evident in Page 7, and that was the
- 16 subject of the Board of Directors meeting in the October
- 17 time period and the prior Board of Directors meetings, where
- there was a lot of discussion between ZF Meritor management 18
- 19 and the owners of the company, ArvinMeritor and ZF, as to
- 20 the reasonableness of the forecast, the need to update it in
- 21 light of current market events. They went through some
- 22 current discussion about those events and how they affected
- 23 the numbers.
- 24 So I know the process they went through and I

know the factors they were considering and I know the

85

- A. Again, I don't have the specific computations.
- 2 Q. How did they get the revenue figure, \$66,133,000? How

DeRamus - cross

- 3 was that derived?
- Α. I know directionally they were forecasting a reduction
- in the price. They talked about in that same presentation, 5
- 6 in the same president's report, the October 2000 president's
- 7 report, they talked about the need to provide a reduction in
- 8 prices, several personal points, depending on the customer.
- 9 So I know directionally what some of their assumptions were
- 10 that were going into this relative to previous business
- 11 plans, but I don't know the specific source for why they
- 12 picked that particular --
- 13 My question is specifically, why did this number --
- 14 who created it? Why did they assume that number up
- 15 there?
- 16 The piece of information that I do understand is that
- 17 they are not -- directionally, are they expecting prices to
- 18 increase relative to the actual prices? That's why I
- pointed you to the fact of my table 5, I had figures for 19
- 20 2000, and there was -- 2000 are actual numbers, audited 21 financials. They are audited and they're aggregated. They
- 22 provide a number. And I know that there's not an increase
- 23 in the per-unit price that they are sell to the OEMs in
- figure 17, and I know in the discussions of the board
- 25 meeting minutes, they are not talking about increasing

000716

22 of 50 sheets

86 88 DeRamus - cross DeRamus - cross price, they're talking about reducing prices. THE COURT: No. 2 I know directionally, the assumption that is 2 (Pause.) 3 going on behind the scenes in developing these numbers is 3 THE COURT: Actually, we've been going for 4 not one of increasing prices on -- considered on a 4 almost two hours. Shall we take a ten-minute break? comparable product-by-product basis, at least based on all 5 MR. OSTOYICH: That would be fine with me. 6 the information I've seen at the time. 6 THE COURT: Ten minutes. 7 7 Now, you mentioned Page 7 of this report. Down at the MR. OSTOYICH thank you, your Honor. 8 bottom of Page 7, there's a table; right? It says Meritor 8 (Short recess taken.) 9 Transmission Company. I'm sorry. ZF Meritor, Detail of 9 10 Volume, Price, and Mix Variance. 10 (Proceedings resumed after the short recess.) 11 Down at the bottom of the middle, it's got a 11 THE COURT: You may continue. 12 conservative plan, a revised plan. Down here, it says 12 MR. OSTOYICH: Okay. Thank you, your Honor. 13 check, check. 13 Your Honor, I'm told I have a few minutes left. 14 14 Do you see where I am? Is it all right if I -- am I on the clock or can I go a 15 Α. Yes, I see that. 15 little bit longer? 16 Do you know whether the person that prepared this 16 THE COURT: I want to make sure we get this 17 checked these figures? 17 completed, so at least another 15 minutes, and we'll go from 18 I do not know that. I know that they were sent to 18 there. 19 the ZF Meritor board of directors and that they were the 19 MR. OSTOYICH: I will do my best, your Honor. 20 basis on which investment decisions were being made. I 20 I would like to switch topics to cover something 21 don't know if they specifically checked whatever the --I have not fully explored at this point, and that's the 21 22 whatever that's in reference to. 22 causes, the causes of ZF Meritor's lost sales and lost 23 Bear with me. At the time I deposed you, I asked 23 market share. 24 you, do you know whether this is even a final document or 24 BY MR. OSTOYICH: whether it's a draft? 25 O. Dr. DeRamus, in your report, in Paragraph 196 on Page 87 89 DeRamus - cross DeRamus - cross 1 You don't know the answer to that, do you? 1 81 --2 2 There were numerous versions floating around. I've MR. OSTOYICH: Can we put that up on the know that there was one that was accompanying a -- that 3 screen? 4 was sent to the -- it was sent -- the transmittal from 4 BY MR. OSTOYICH: 5 ZF Meritor to the Board of Directors, and there's no This is the section of your report where you look at 5 6 discrepancy between that and the numbers that are in my whether there might be determinative causes for some of the 7 report. company's lost sales and lost market share; right? 8 So like I said, there are multiple copies of 8 Α. That's right. That's the introductory paragraph of 9 this forecast prepared and available in the documents. 9 that section. 10 Dr. DeRamus, let me ask the request very clearly. 10 Right. And in the introductory paragraph, you say you 11 Do you know whether this is a draft or a final document? 11 looked at some other potential causes for their 12 I do not know whether this specific one is a draft 12 less-than-expected sales and lower-than-expected market or final one. I do know that there was one that was sent to 13 13 share, including failure to price products competitively in 14 the Board of Directors, again, as a basis for investment 14 the market; correct? 15 decisions that was approved by the president of the company, 15 A. Correct. 16 and that -- the numbers are consistent with the numbers in 16 Q. Quality of differences between the Meritor 17 my report. 17 transmissions and the Eaton transmissions; correct? 18 Dr. DeRamus, I want to switch from your damages Q. 18 Α. Correct. 19 model to some of your causation analysis, causation 19 Q. Overly optimistic assumptions in the method, 20 analysis. 20 FreedomLine penetration; right? 21 21 Α. Correct. 22 Q. And if we look at Paragraph 196 on Page 81 of your 22 Now, you say you examined each of these in detail. 23 report --23 You say the data of the documentary evidence is clear that 24 MR. OSTOYICH: Your Honor, do you mind if I come 24 Eaton's LTAs and the various means undertaken by the OEMs 25 up and get a cup of water? 25 to comply with the terms of these LTAs were a significant

90 92 DeRamus - cross DeRamus - cross factor and, indeed, the primary factor in explaining the various provisions of the LTAs. And throughout that 2 company's performance; is that correct? section, it discusses efforts by Paccar and Eaton to comply 3 Δ That's correct. 3 with terms of the LTAs. 4 Which LTAs did you mean were a significant factor and, 4 And in figure 13, several pages of text in, here 5 5 indeed, the primary factor? and then figure 13 describes the changes to -- in Eaton's 6 A. In my report, I discussed the LTAs with all of the 6 market share corresponding to what's occurring according to 7 OEMs. They are going back to -- even going back into the 7 the terms of the -- the attempts -- attempts by Eaton and 8 1996 time period. But it's clear from -- so I would compare 8 Paccar to comply with those terms. 9 all the LTAs and the means by which they were -- to have 9 Now, that Paccar contract, Dr. DeRamus, did you look 10 been the primary factor explained to ZFM in the market. 10 at the effect each specific term of that contract had on 11 So just so we are clear, when you say the LTAs were 11 Paccar's desire to purchase from Eaton or ZF Meritor? 12 the primary factor, you are talking about all the LTAs from 12 A. I'm sorry. Each term within the contract? 13 the mid-nineties? 13 Q. Correct. 14 To be clear, there were different provisions in 14 Α. The effect of each of the individual terms? 15 each of the LTAs by 1990, and different LTAs, the 15 Q. Correct. 16 provisions had different type of effect to different type 16 Α. No, I did not. 17 of binding effect on the market. Some of them had -- and 17 Q. Now, you say here in Paragraph 196, this introductory 18 paragraph, you say the LTAs were the primary factor. over time, had greater market share penetration 18 19 requirements. 19 I assume that means there were some secondary 20 20 One of them was -- I considered, or I concluded factors for the decline in sales and market share; is that 21 to be a horizontal price-fixing agreement between Mac and 21 right? 22 Eaton. 22 Well, in determining from an economist's standpoint --23 So they were different in different aspects, 23 I use the term liability loosely -- in determining 24 but certainly by the -- by the 2000 time period, what's 24 anticompetitive effects, the primary question is, did the called -- what Eaton refers to as the Eaton OEM partnership 25 25 contracts cause, and Eaton's conduct cause harm to 91 93 DeRamus - cross DeRamus - cross period, that all of those, the LTAs, in effect, had those 1 competition? The question is one of materiality. 2 provisions that I concluded were significant factors in 2 Were they, A, the material cause of ZFM's 3 explaining the defendant's decline in market share. 3 difficulties in the market? From those, I concluded that 4 Q. So we have at least 10, 12 different contracts that they were. You can see that quite specifically, and 5 were the primary factor; is that right? negotiations with the -- between the OEMs and the 6 I would say all the contracts, the contracts with all individual and the -- and Eaton, and between the OEMs 7 of them, with the major OEMs. I do make a distinction in my and their customers. You can see the individual price 8 report between the types of conduct that's occurring over 8 increases. 9 time. That's why I spend some amount of pages going through 9 So there are very specific instances in which 10 each of the contracts and looking at the data, examining the 10 Eaton induces the OEMs to remove from a  $\operatorname{\mathsf{--}}$  from a  $\operatorname{\mathsf{--}}$  an 11 data, to correlation changes in the market share with the 11 OEM's data book a very specific action. We're removing 12 implementation of the different LTAs. 12 this product from the data book, this ZFM product from 13 Did you look at, did you measure any particular effect 13 the data book, and we're going to, in fact, increase 14 on ZF Meritor's shares, market share, from any particular 14 ZFM's prices, and Eaton complaining to the OEM if it 15 contract, or did you treat them all together? 15 doesn't meet -- if the OEM does not implement that price 16 I looked at them individually. 16 increase. 17 Q. All right. Where in your report do you measure the 17 So there is a very specific link between the 18 effect of any particular contract? Let's take the Paccar 18 contracts and contract terms and the harm to competition 19 contract in 2000. 19 that I observe. 20 In Section A is where I go through each of the 20 All right. Dr. DeRamus, my question is simple. You 21 contracts, so bear with me one moment. 21 say the LTAs are the primary factor. That means there are 22 22 (Pause.) some secondary factors; is that right? 23 23 THE WITNESS: So the 2000 LTA is discussed Well, I conclude as a -- at a minimum, that is the beginning on, I believe, one -- well, it's Page 67 is where 24 primary factor. the discussion begin s, and it discusses -- it discusses 25

In order to conclude that there is

94 96 DeRamus - cross DeRamus - cross anticompetitive effect, I conclude that -- I need to 1 So you may continue until I tell you you need to conclude there is some substantial, some significant 2 stop. impact, and the courts may have a different opinion as to 3 MR. OSTOYICH: Okay. Thank you, your Honor. I what that significance is, but as an economist, I look for appreciate that. a certain level of significance, and I do see some impact. 5 BY MR. OSTOYICH: 6 In fact, I did conclude that it was the primary barrier to 6 Dr. DeRamus, I asked you about your econometric 7 ZFM succeeding in the market. 7 analysis in your deposition; correct? 8 All right. What secondary factors did you look at, 8 Yes. But if you would point me to a specific page? 9 Dr. DeRamus? 9 Q. Yes. Page 309, line 4 through line 14. 10 Α. As I described throughout the section, I looked at 10 I asked you: "Am I right that your 11 issues of quality, I looked at macroeconomic factors, the 11 econometric" --12 reduction in sales caused by overall conditions. I looked 12 MR. OSTOYICH: I have a deposition clip, your 13 at the potential for price differentials to explain the 13 Honor. Do you mind if I just put it up? 14 pricing, the market share developments. 14 THE COURT: No, I don't mind. 15 So I looked at all of the things that are listed 15 MR. OSTOYICH: Can we just put that one up? His 16 in that report. 16 deposition, Page 309. I will read it while we're doing 17 These things up here, A, B and C, did you go through 17 that. 18 those? Paragraph 196? 18 BY MR. OSTOYICH: 19 Α. Yes. 19 I asked you: "Am I right that your econometric 20 Q. You did an econometric study -- right -- referenced 20 model estimating the share of ZF Meritor would have obtained 21 below this? 21 the Class A transmission sales? Have no variable taking 22 Α. That's correct. 22 into account the relative price between the ZF Meritor 23 Q. And you had explanatory variables in your econometric 23 transmission and the equivalent Eaton transmission? 24 study; is that right? 24 "Answer: That's correct. 25 Δ That's correct. 25 "That's not the structure of the model I chose." 95 97 DeRamus - cross DeRamus - cross And you had no explanatory variable or differences, Right? That's what you said? 2 relative differences in the price between Meritor 2 Α. That's correct. 3 transmissions and Eaton transmissions, did you? 3 So your econometric model did not take into account 4 That would be incorrect as a matter of econometrics, Α. the explanatory paragraph in the differences in the price 5 so, yes, I did not include it. between the company's' transmissions; right? 5 6 Q. Dr. DeRamus, do you have your deposition in front of 6 Α. No. I did not feel it was appropriate --7 you? 7 Your econometric model didn't take into account the 8 Α. I do not, sir. qualitative differences between the transmissions; is that 8 9 Q. You say no? 9 10 Α. I do not. 10 No, but I did take that into consideration in other 11 Q. I asked you in your deposition --11 ways. I did feel the purposes of my econometric model was 12 MR. OSTOYICH: Your Honor, can I bring a copy 12 not necessary. Indeed, it would be infeasible. 13 up? 13 Your econometric model had no explanatory variable for 14 THE COURT: Certainly for him. I certainly 14 the projections about the FreedomLine's projections of 15 don't need one. 15 success in the market either; right? 16 MR. OSTOYICH: I'm sorry. I didn't hear you. 16 A. Correct. And I don't believe those would be relevant 17 THE COURT: I said you certainly may bring one 17 factors either. 18 to him, yes. 18 So your econometric model did not take into account A, 19 (Mr. Ostoyich handed a deposition transcript to 19 B and C of Paragraph 196; right? 20 the witness.) 20 That is correct. They were not explicit variables 21 THE COURT: And I have to say, the defendant 21 included in my econometric model. 22 is getting more than the allotted time, in part because we Your econometric model took into account what? T bill 22 Q. 23 have very long answers from the expert witness, and so I 23 rates; am I right?

allotted.

don't believe that it's fair to hold defendant to the time I

24

24

25

I included a lag variable for ZF Meritor's market

share. I included a variable to account for the beginning

#### DeRamus - cross

- 1 of the conduct time period, and I accounted -- and I included four additional variables, including total truck
- builds and interest rates, measure of interest rates, a
- measure of consumer confidence, and measure of the 5 pricina.
- 6 Q. Dr. DeRamus, I want to go back to your conclusion
- 7 here, your summary in your introductory paragraph, that the 8
  - LTAs were significant; indeed, the primary factor.
- 9 I'm going to play you a clip from the deposition 10 of one of the Meritor witnesses in the case. This is Rick 11 Martello. He's the president of the joint venture, or he
- 12 was the president of the joint venture. And we're going to
- 13 look at his deposition, Page 320.
- 14 MR. OSTOYICH: And if your Honor will indulge
- 15 me --

25

- 16 MR. TASKIER: Your Honor, I have no objection 17 to him showing Dr. DeRamus his deposition, because he can
- 18 answer questions and fill in the record, but the notion
- 19 that he's cherry-picking pieces of other witnesses that
- 20 we have not had any advance noticed of, counterdesignated,
- 21 it strikes me as a little unfair and not helpful.
- 22 THE COURT: Well, certainly, if this were a
- 23 trial that an expert can be cross-examined with this sort
- 24 of material, I guess my question is, if the purpose of this
- hearing is to determine whether the conclusions reached in
  - 99

# DeRamus - cross

- this report are, in fact, reasonable and based on all 2 available information, it seems to me this is appropriate 3 cross-examination.
- 4 MR. TASKIER: Thank you, your Honor.
- 5 MR. OSTOYICH: Thank you, your Honor.
- 6 If we can, I'm going to play what the president
- 7 of the joint venture said.
- 8 Can we play that, please?
- 9 (Videotaped deposition excerpt played as
- 10 follows.)
- 11 "Question: Now, from day one, when you formed
- 12 the joint venture, you expected your manual transmission
- 13 sales to decline; right?
- 14 "Answer: That's correct.
- 15 "Question: And, in fact, they did decline:
- 16 right?
- 17 "Answer: That's correct.
- 18 "Question: And they declined more steeply than
- 19 you expected; right?
- 20 "Answer: They declined more steeply than we
- 21 expected from the initial -- from the initial projection.
- 22 "Question: And you had --
- 23 "Answer: And that had many, many reasons for
- 24 it, not one."
- (End of videotape deposition excerpt.)

# DeRamus - cross

- BY MR. OSTOYICH:
- 2 Now, he says there are many, many reasons for the
- 3 decline. You say the primary one is the LTAs, or the whole;
- right?
- 5 I believe I say the decline in their market share and
- exit from the market is due to the LTAs. There are, for
- 7 example, decline in the overall size of the market that I
- R account for, and even in my damages analysis and in the
- econometric analysis, I'm taking the time period from July 9
- 10 2000 forward after there were -- to accounts for issues that
- 11 were occurring with their transmissions prior to the time
- 12 period.
- 13 Q. Well, in fact, Dr. DeRamus, your report plots out the
- 14 market share of ZF Meritor; right?
- 15 Α. That's correct.
- 16 Q. Okay. If we look at figure 8 on Page 39 of your
- 17 report, this shows the blue line as Meritor's market
- 18 share -- correct -- excluding that?
- 19 Α. Yes.
- 20 Q. Okay. And there's a decline back here from '99 to
- 21 2000 in the market share; is that right?
- 22 Α. That's correct.
- 23 Q. And that's before any of the contracts that you
- 24 pegged your damages to, which occurred here (indicating);
- 25 right?

101

100

# DeRamus - cross

- 1 Provide a fair amount of caveats in my report as to
- what's going on in that 1999 and prior time period. The
- primary conduct at issue I focused on was 2004.
- 4 So let's look at our records. So this decline in
- 5 share, '99 to 2000, which is before any of the contracts
- 6 that you are pegging your damages to?
- 7 Α. Using -- effectively, I would say that's correct, yes.
- 8 Now, what do you, Dr. DeRamus, what do you attribute Q.
- 9 this decline in share from '99 to 2002 to?
- 10 Well, there's some discussion in the ZF Meritor board
- 11 meeting minutes and the presentation that the president
- makes to the company contemporaneously with this. One of 12
- 13 them is a loss of Ryder, one of their more significant --
- 14 not the loss of Ryder, but significant decline in Ryder's
- 15 purchases.
- 16 They do note some quality problems that they 17 are going to be taking some corrective action on, and
- 18 various other facts. There are about eight different
- 19 facts.
- 20 I happen to have that report here. Maybe we can call
- 21 it up. It's in DeRamus Exhibit 2.
- 22 MR. OSTOYICH: If you can pull that up and
- 23 scroll through, it's about, I think, about the tenth page in
- 24 there. It ends with, 445.
- 25 BY MR. OSTOYICH:

#### DeRamus - cross

- 1 Q. There it is. This is what you are referring to;
- 2 right? This board report? This is from July of 2000. This
- 3 is an excerpt.
- 4 A. That one. There's a long discussion that begins in
- 5 March of 2000 and goes into October, but there are
- 6 discussions a bout those other various factors.
- 7 Q. Now, you said the primary cause of the company's
- 8 decline in share was the LTAs; is that right?
- 9 A. Over this entire time period, in terms of its
- 10 exclusion from the market and its dropping down to
- 11 effectively a market share of zero, yes.
- 12 Q. Now, this is the board presentation, and this is what
- 13 Mr. Martello, the president of the joint venture of the
- 14 board of the company, happened to their market share prior
- 15 to mid-2002; right?
- 16 A. I'm sorry. Prior to when?
- 17 Q. Mid-2002.
- 18 A. This is prior to mid-2002, yes.
- 19 Q. Does Mr. Martello discuss initially the variance
- 20 between projected market share penetration, which is
- 21 expected to increase from 16 percent to 22 percent, but
- 22 actually decreased.
- We're talking about the decrease, and just
- 24 looked at the blue line; correct?
- 25 A. Correct.

DeRamus - cross

- 1 is when several of these, or the time frame in which several
- 2 of these are being negotiated. I don't know how much
- 3 information he has about the specifics of the time, but he
- 4 is aware that these discussions are going on. And as I
- 5 mentioned in my report, in 1999, I'm also concerned about
- 6 the provision in the Freightliner, LTA where Eaton
- 7 effectively induces Freightliner to increase effective price
- 8 of ZF Meritor's transmissions. That's going to have an
- 9 impact on the market share.
- 10 Q. Now, Dr. DeRamus, this many of these factors continued
- 11 into 2000, 2001; right?
- 12 A. Some of them may have.
- 13 Q. Yes. Like this one, multi-year fleet business. The
- 14 multi-year fleet business was lost in 2000. Continued into
- 15 next year; correct?
- 16 A. That's correct.
- 17 Q. Yes.
- 18 A. I would say that happens throughout.
- 19 Q. This one, right here, poor product quality. In fact,
- 20 you address that in your report?
- 21 A. That's right.
- 22 Q. And you say on Page 211 -- I'm sorry -- Paragraph 211
- 23 on Page 89 of your report, the company had significant
- 24 warranty claims beginning in approximately January 2000;
- 25 right

103

# DeRamus - cross

- 1 Q. And he attributes it to a number of factors, a number
- 2 of factors contributed to that situation, including, and he
- 3 lists seven factors; right?
- 4 A. Correct.
- **5 Q.** Poor product quality image, decrease in Ryder
- 6 business, turnover in the company's sales organization, an
- 7 increase in Eaton auto shift sales, the push towards 13
- 8 speed transmissions, so on; correct?
- 9 A. Correct.
- 10 Q. Where does your but-for analysis take this into
- 11 account?
- 12 A. It takes it entirely into account. That's why I used
- 13 the November 2000 SVP basis in my analysis. That's why it's
- 14 conservative. It is taking the previous business plan.
- 15 They reduced -- they dropped their forecast in half to
- 16 account for these factors after extensive discussion by the
- 17 board, and after explicit direction by the board to
- 18 management that says you need to revise your projections
- 19 to account for all of these factors you recognize taking
- 20 place.
- 21 I would also say other documents at the same
- 22 time, also, Mr. Martello is recognizing that Eaton is taking
- 23 an aggressive action with his LTAs during this time period.
- 24 There are negotiations.
- 25 This is an October 2000 document. June of 2000

105

104

# DeRamus - cross

- 1 A. Yes. I'm sorry. Could you point me to the paragraph
- 2 again?
- 3 Q. Paragraph 211. It starts down here at the bottom of
- 4 the page, ZFM did experience significant warranty claims for
- 5 its G-Platform transmissions that -- which were first
- 6 introduced into the market?
- 7 A. Correct.
- 8 Q. And those significant warranty problems continued
- 9 throughout 2000, correct, the G-Platform?
- 10 A. Correct.
- 11 Q. And 2001?
- 12 A. Correct.
- 13 Q. And they continued in 2002; right?
- 14 A. Correct. My understanding is they were resolved by
- 15 approximately mid-2002.
- 16 Q. Right. You say that in your report? You say in this
- 17 Paragraph 211, by mid-2002, the problems with ZFM's
- 18 G-Platform transmissions had been fixed, as is clear from
- 19 data on ZFM's warranty approvals; correct?
- 20 A. Right.
- 21 Q. And I am going to show you some documents in the
- 22 case.

23

- Am I right that because you believe that the
- 24 G-Platform transmission problems were fixed in mid-2002.
- 25 your but-for world, you did not deduct anything from your

106 108 DeRamus - cross DeRamus - cross but-for world for lost sales due to ongoing G-Platform for ZFM's decline in market share throughout the time warranty problems; right? 2 period, particularly after 2002. 3 To be clear in my but-for market shares, I don't 3 Dr. DeRamus, your but-for world, your damages, your believe there are any forecast of G-Platform units in the standard methodology, is supposed to keep everything 2000 and 2002 time period. I need to look through. 5 constant except Eaton's conduct, the actual; right? 6 I know the basis of my case. I need to look at 6 Α. To the extent possible, it accounts for every other 7 my econometric results just to verify, so there's no --7 factor, yes. 8 there is nothing to adjust for. 8 You are supposed to isolate the effect of Eaton's 9 Wait. We looked at table 5 before. You had a but-for 9 allegedly anticompetitive conduct; right? 10 line for the number of G-Platform units the company was 10 That is the general purpose. Again, within the 11 going to sell in the but-for world every year, now through 11 constraints of what the data allow. 12 two 2009; correct? 12 Now, you say here that the G-Platform problems have 13 I believe -- bear with me one moment. 13 been fixed by mid-2002, and therefore you didn't take them 14 (Pause.) 14 into account as having caused any lost sales after mid-2002; 15 15 THE WITNESS: Yes. And you'll see in that line right? 16 9, that there are zero units for 2001 or 2002 as the 16 A. As a significant factor, yes. 17 incremental units. 17 I'm going to show you some documents. I want to see 18 BY MR. OSTOYICH: 18 if you took these into account because I can't find it. 19 And the figure you have for the but-for G-Platform 19 Now let's look at Hyatt 5, for example. Let's 20 20 unit volume, you took the total from the November 2000 go to the next page. 21 business plan; right? 21 This says, G-Platform -- this is December 2002. 22 Α. Correct. 22 G-Platform overdrive transmission failures continue to 23 Q. And then you adjusted for the overall market decline; 23 24 is that right? 24 All right? Do you see that? 25 A. Correct. 25 Α. I see it. If I can see the document, it would be 107 109 DeRamus - cross DeRamus - cross 1 Q. But you did not deduct anything, any sales, from helpful. 2 2 ongoing G-Platform problems? Q. I'm happy to hand it up to you. 3 Α. For 2000 and 2001, there's nothing to deduct. As I 3 MR. OSTOYICH: Your Honor, I will bring you said, the incremental units are zero. 4 a copy as well (handing exhibit to the witness and the 5 You did not end up with anything for G-Platform in 5 Court). 6 2002, 2003, 2004? 6 THE COURT: Thank you. 7 7 Α. That's correct. Based on my review of the evidence, I BY MR. OSTOYICH: 8 concluded nothing was appropriate. 8 I'm up at the top of the second page, where Mr. Hyatt 9 Q. What do you mean, based on your review of the 9 reports in December of 2002, the G-Platform overdrive 10 evidence? 10 transmission failures continue to mount. He says, it 11 I looked to see the effect of the warranty issues in 11 appears that many of our long-term customers have 12 this industry. And there are -- particularly with any 12 experienced enough fun and will change specs in fiscal year 13 introduction of new products, there would be some warranty 13 '03. 14 issues. 14 Now, we know because the company reported what 15 15 The more you have a technological -actually happened; right? We know that the company actually 16 technologically advanced product, there are going to be some 16 lost sales after mid-2002 because of G-Platform transmission 17 issues. There were significant issues with Eaton's own 17 problems; is that right? 18 transmissions. 18 Well, we don't know that for certain. We know that 19 ZF Meritor had, or previously Meritor 19 there are some problems that are continuing, I would say 20 Transmissions back then, had even more significant problems 20 consistent with other documents I've seen that make very 21 with its F-Platform transmission when it was introduced, and 21 similar statements about Eaton's own transmissions, and 22 that had no long-term effects on its sales. 22 the question ultimately is how significant effect and 23 The primary -- as I looked at the data, I 23 is it swamped by other factors that are going on in the concluded that the primary effect of warranty issues are 24 market.

25

Again, the point of my liability testimony

increased costs, and they were not a convincing explanation

110 112 DeRamus - cross DeRamus - cross you're pointing to is one about significance, is are the My analysis is at an aggregate level, correct. I LTAs having a significant effect and, in fact, I conclude did not go through and do a lost sales analysis on a that they were. Without going through the rest of the customer-by-customer basis. documents, you would need to see what other factors that 4 MR. OSTOYICH: With your Honor's indulgence, if 5 ArvinMeritor is discussing. I can do a couple more, I've got a lot of these, and I would 6 Let's look at paper Exhibit 7. 6 to make the point. 7 By the way, you did not look at Mr. Hyatt's 7 THE COURT: I'm going to give you 15 more 8 deposition before you prepared your report, did you? 8 minutes. Then I need to let --9 9 I don't recall. MR. OSTOYICH: I appreciate that. 10 Q. 10 Now, this exhibit, when it comes up, this is an THE COURT: -- the plaintiff proceed. 11 exhibit from February of '03. There's a report up here 11 MR. OSTOYICH: Let's call up Hayes 20. 12 about Knight Transportation. 12 If I could, I will walk this up as well, your 13 MR. OSTOYICH: Your Honor, I will give you a 13 Honor. Now, Page 20 is now January of 2004. There's an 14 copy (handing exhibit to the Court). 14 e-mail in the middle of the page from Truck Country, Mike 15 THE COURT: All right. 15 McCoy, to Dennis Kline. 16 BY MR. OSTOYICH: 16 BY MR. OSTOYICH: 17 Knight Transportation in Phoenix, Arizona, which has 17 Dennis Kline was the Vice President of Sales and 18 over 1700 tractors with the full Meritor drivetrain plus. 18 Marketing for the joint venture; right? 19 And then if you scroll up a little bit. 19 Again, I don't recall the exact titles. 20 Now, this has been forwarded -- a little more. 20 Q. You did not read Mr. Kline's deposition prior to 21 Tom Gosnell was the chairman of the board, joint venture; 21 preparing your report, did you? 22 right? 22 Α. I don't recall. 23 Α. I don't recall his exact title. I know he was --23 Now, Mr. McCoy says, Dennis, I'm sorry it has come to 24 Q. Yes. 24 this, but I have told Foodliner to change all of their 25 Δ -- senior level. 25 remaining truck orders to Eaton components. 111 113 DeRamus - cross DeRamus - cross Mr. Gosnell reports to Wolfgang Vogel, who set up the 1 This is January of 2004; right? 2 Α. I'm sorry. Would you mind if I scanned the document 3 Wolfgang, here is some more bad news regarding a really quickly? 4 large, formerly loyal transmission customer who will not be Q. Not at all. 5 buying our J.V. products due to G-Platform performance 5 I'm trying to orient myself. 6 issues. 6 (Pause.) 7 THE WITNESS: Okay. I'm sorry. Go ahead. That's February of '03. Your but-for world does 7 8 not have any lost sales from this large, formerly loyal 8 BY MR. OSTOYICH: 9 transmission customer, who, in the actual world, will the 9 Q. Now, here's a lost sale with Foodliner in January of 10 not be buying anymore of the company's transmissions because 10 '04. 11 of G-Platform performance issues; is that right? 11 Were you going to take that into account in your 12 It's hard for me to say definitively what is occurring 12 but-for world? 13 based on a quick scan of the document. 13 Well, January of 2004, the joint venture is 14 There were a number of fleet customers that 14 effectively dissolved. There are -- the question is 15 Freightliner and -- this is a Freightliner deal? 15 really what ultimately led to the dissolution of the joint 16 Yes. There were significant activities by 16 venture. 17 Freightliner to convert customers during this time period, 17 That's why I'm asking the question. Where do you 18 so I would have to go back and look and -- significant 18 take this into account if the customers were stopping 19 pressure, significant removal of other incentives. 19 purchases because of G-Platform transmission problems? 20 20 So it's hard to say, based on this communication Well, again, I'm not sure this is because of 21 what, in fact, was the cause of losses, if any, that 21 G-Platform transmission problems. This does talk about

Q.

riaht?

But the one thing we do know is you did not take

into account any lost sales from Knight Transportation;

22

23

24

25

22

23

24

25

the warranty processing procedures that they had put in

You are looking at something that may, in fact,

place, so it is, again, a bit of -- economists will refer to

it as an endogeniety problem.

114 116 DeRamus - cross DeRamus - cross be a reflection again -- but as I said before, I did not period when issues were occurring, not a quantitative do my analysis on a customer-by-customer basis, nor have measure that I could then use as part of a correlation I ever seen a damages analysis done a -- on this detailed 3 statistic. individual customer basis, because I think it's 4 Q. By the way,  $\operatorname{Dr.} \operatorname{DeRamus}$ , did the company's warranty 5 impractical. 5 expenses actually increase between 2002 and 2003? 6 6 My report stands in terms of what I did. The data I recall seeing on the G-platforms was that 7 Did you do -- I can't find it in the report. Did you 7 the per-unit warranty accruals declined over the time 8 do a correlation study between the company's G-Platform or. 8 period. The peak was in 2001. 9 for that matter, the FreedomLine, because FreedomLine had a 9 Well, the total amount the company incurred as a 10 lot of problems too; right? 10 result of the G-Platform, the warranty expenses, was several 11 The FreedomLine had some -- had some -- some warranty 11 million dollars in 2002; right? 12 issues when it was released, such that the auto shift, 12 I don't recall. Again, from my perspective, the 13 Eaton's auto shift had tremendous warranty problems, and 13 issues are per-unit basis, not the aggregate value. 14 they -- any time there's a product introduction, there is 14 I just want to be clear because you made a fact 15 one. That is why I concluded, as an economist, that 15 statement that the G-Platform values were fixed in 2002. 16 16 warranty issues are not -- and different changes in quality I want to show you a piece of testimony, which 17 issues that are happening in the market are not explaining 17 is a 30(b)(6) deposition. That means it's a company 18 this very severe pattern you see in the data, which is 18 representative testifying on behalf of the company. And 19 increased market share for ZF Meritor prior to 2000 and a 19 this is the testimony at Page 240 of the company's 20 sharp decline thereafter. 20 representative on the warranty expenses that the company 21 Did you do a correlation study between when the 21 incurred at this time. 22 22 G-Platform and FreedomLine warranty problems were hitting MR. OSTOYICH: Would you play that, please? 23 and the customers' resulting share subsequent to those? 23 (Videotaped deposition excerpt played as 24 Problems? 24 follows.) 25 A. Actually, I did. I didn't estimate the correlation 25 "Question: And the next entry is warranty paid. 115 117 DeRamus - cross DeRamus - cross co-efficients, but I looked to see when the issues were --And then there's a figure of eight million for actual for were being -- were arising, and what was going on in the 2 2 2002. 3 3 market share here during this time period. "Does that represent that eight million was paid Let me make that clear. You said you didn't in warrants tea for fiscal year 2002? 5 5 estimate the estimate of co-efficients. What do you mean by "Answer: That's what it appears to indicate. 6 that? 6 "Question: And the next column, 4.2, does that 7 A. Well, you're presuming that there -- one would have 7 indicate that it was worse than planned by 4.2? 8 created some measure of quality, quality index, so relative 8 "Answer: Based on -- based on what's shown 9 quality index. That's unclear to me how you would do that, 9 here, that's how I would read that." 10 because quality ultimately is a subjective issue, and there 10 (End of videotape excerpt.) 11 are issues of measuring ZF Meritor's quality and issues of 11 MR. OSTOYICH: And the next clip after that, measuring Eaton's quality and then making an inference about 12 12 (Videotaped deposition excerpt played as 13 how that, in turn, relates to customer sales. 13 follows.) 14 Q. 14 "Question: And then under -- if you go down a 15 I did not do that step, and one could, in theory, do a 15 little bit under transmission warranty charges, there's a 16 16 correlation of some index of sales, but the data were not figure 8.4 million for June year to date? 17 available to me to do that. 17 "Answer: Yes. 18 I just want to be clear. You did not do a study 18 "Question: Does that represent that the 19 as part of your analysis correlating all of these G-Platform 19 transmission warranty charges for fiscal year 2003 as of 20 or FreedomLine warranty problems with the company's actual 20 June year to date were 8.4 million? 21 performance in the market? 21 "Answer: I believe that's what it indicates. 22 I analyzed whether the warranty issues identified 22 "Question: And does this document also indicate 23 in the documents correlated with decline of sales. I didn't 23 that that was about four million worse than planned? 24 24 do a formal physical correlation measure, because all I "Answer: I believe that's what it indicates. had was a qualitative indicator of approximately a time 25 "Question: And then if you go over a little bit

118 120 DeRamus - cross DeRamus - cross 1 farther, there's a full year 2003 forecast, and it indicates before, there is some endogenating problem associated 2 that the that the transmission warranty charges are with trying to tie it up closely for any particular forecasted to be 9.8 million for the full year, fiscal year 3 customer. 2003; is that correct. 4 But I would say that one approach someone could 5 "Answer: That's what it shows." 5 take would be to adopt additional warranty expenses, if the 6 (End of videotape excerpt.) 6 warranty expenses were higher. Again, that's why, in my 7 BY MR. OSTOYICH: 7 fourth method, I deducted all of the incremental operating 8 Now, so this suggestion that the warranty expenses 8 costs that the company incurred during the -- during this 9 were increased in 2002, 2003, where do you take the 9 time period, from the damages. 10 increasing expenses of warranties and the effect that that 10 How would someone take your damages figures and 11 had on customers in your but-for world? Where do you 11 separate out lost sales that were caused by Eaton's lower 12 measure that? 12 manual transmission prices? 13 As I said, the documents that I was looking at were 13 There, I think you're assuming something about the 14 looking at a per-unit basis, and the per-unit spend appear 14 anticompetitive conduct of Eaton, because ultimately, there 15 to peak in 2001 and then decline in 2002 and significantly 15 is -- the part of the conduct at issue in the provision of 16 thereafter. And, again, I didn't see a significant effect 16 rebates, the way those rebates are structured, and the 17 in terms of when those peak per unit warranties warranty 17 impact those had on customer decisions. So there's a whole 18 issues were occurring and the decline in their sales. 18 host of issues associated with doing that. 19 My question was simply, Dr. DeRamus, where do you 19 Well, this is my question. A little bit more precise. 20 take that into account and the effect that those increases 20 MR. OSTOYICH: I promise, your Honor, I will be 21 in warranty expenses was having on customers, where do you 21 done in a second. 22 take that into account in your but-for world? 22 BY MR. OSTOYICH: 23 It would depend on how they accounted for them. It 23 You looked at the figure before, which was gross 24 may be in my -- my fourth method, where I'm adding back in 24 prices, did not have the rebates in there. Rebate prices 25 the operating expenses. 25 were at all times for manual transmissions about 119 121 DeRamus - cross DeRamus - cross 1 O. But it's your but-for world? four-and-a-half percent lower. Those are the figures you 2 Α. I'm sorry? 2 plotted out. 3 Q. It's but-for world. Where did you take it into 3 How would someone take your damages and separate 4 account? 4 out sales that were lost because Eaton's manual 5 I looked at the warranty issues and to see whether 5 transmissions were at all times 4.4 percent lower? 6 warranty and quality problems associated with ZF Meritor 6 I -- I don't think one necessarily should do that, 7 transmissions were a cause of its significant decline 7 because there is a -- an issue -- I'm at a loss to say -- to 8 from -- again, this pyramid-shaped pattern from 2000 to --8 address the issue you're talking about. 9 down to a negligible quantity of sales in 2000 forward, and 9 Ultimately, the question is the but-for world, 10 I concluded they weren't. I did not do any further 10 what would they have sold. They would have an aggregate 11 adjustment for warranty costs. 11 measure, the aggregate measure of what their sales would 12 Dr. DeRamus, how would -- this is a hypothetical. How 12 have been. Absent Eaton's conduct and the contracts and the 13 would someone taking your damages figure separate out lost 13 conduct of Eaton and the OEMs in furtherance of their LTAs, 14 sales or lost market share attributable to G-Platform 14 those prices may well have been -- Eaton's prices may well 15 warranty problems versus FreedomLine warranty problems? 15 have been higher. Those are also prices paid by OEMs, so

21 FreedomLine warranty problems?
22 A. Well, one -- I don't think there is a method out
23 there to, again, do the damages analysis, lost profits
24 analysis, on a customer-by-customer basis, because there
25 that right?
26 A. Two lines on that graph, at all times after 2001,
27 the blue -- the Eaton line is below Meritor. I don't know

16

17

18 Q.

19

20

25

Meritor.

those are not necessarily prices that were offered by ZF

Just so we're clear, you did not as part of your

study separate out any lost sales caused by that gap?

The gap of Eaton's gross prices to Eaton's OEMs were at

if I would go so far as to say all their prices, their

16 A.

17

18 Q.

19

20

please?

I'm sorry. Could you read the question back,

I will state it again. How would someone, given your

damages figures, how would someone separate out lost sales,

lost profits caused by G-Platform warranty problems or

are so many different factors and I think is, as I said

122 124 DeRamus - cross DeRamus - cross 1 prices were always lower, because, for example, you have purposes just as this was. So I think that there's case law 2 issues of what were their prices that ZF Meritor is being -which supports the notion that this is a reliable basis from that customers who want to buy ZF Meritor transmission are 3 which to work and that this is not junk science. actually paying and those are affected by the agreements 4 THE COURT: You may step down, I think. I don't 5 that the OEMs had with Eaton to increase ZF Meritor's 5 have specific questions. I have to say that your 6 prices. 6 explanations, if I were sitting here in a trial, would make 7 7 So you're confounding issues of liability from me think you're going to confuse the jury, and not 8 the issues of damages. 8 illuminate the jury, which may be what you are trying to do. 9 Dr. DeRamus, right above this, you say in your own 9 You may step down. I don't know. 10 text, Eaton's manual transmission prices were an average 10 (Witness excused.) four-and-a-half percent lower during this time period; 11 11 THE COURT: And if, in fact, I am required to 12 right? Right above that? 12 accept as a fundamental basis of an expert report a 13 On average, the -- that's what the data in the OEM 13 strategic business plan with economic analyses that don't 14 invoice database --14 take into account anything that was really going on, then I 15 Q. Gross prices, four-and-a-half percent lower for manual 15 guess that's what you are telling me, but I'm not real 16 transmissions? 16 comfortable with it. 17 A. 17 That's what that data shows. So you may rest on your laurels and I will do 18 You did not separate out as part of your damages 18 what I need to do. 19 19 analysis any of your particular lost sales, where customers If you all want to submit ten pages, or no more 20 decided to buy transmission from Eaton because its price 20 than ten pages based on the additional explanation, for what 21 was, on average, 4.4 percent lower for 9 and 10-speed manual 21 it's worth, you may, and I will issue a decision within 22 22 transmissions; is that right? ten days. Ten pages or less. All right? 23 No, I don't think that would be the appropriate way to 23 All right. Thank you, counsel. 24 do a damage calculation. 24 (Counsel respond "Thank you, your Honor."). 25 25 MR. OSTOYICH: Okay. Your Honor, I appreciate THE COURT: I have to get out of my computer, so 123 125 DeRamus - cross 00:08:34 1 you don't have to wait for me. your indulgence. 00:08:36 2 (Court recessed at 4:50 p.m.) 2 THE COURT: All right. 3 MR. OSTOYICH: That's it. 4 THE COURT: Let's have any redirect. 5 MR. TASKIER: Your Honor, Dr. DeRamus appeared 6 today for purposes of being examined under Rule 702 for 7 Daubert analysis and determining whether his testimony and 8 his report is sufficient reliability and fit to go to the INDEX 9 jury and that it's not junk science. 11 PLAINTIFF'S TESTIMONY 10 Based on what he has said so far today, I have 12 DIRECT CROSS REDIRECT RECROSS 11 no additional questions, but I invite the Court, if it has 13 DAVID W. DERAMUS 12 any questions, to help it make that determination, to feel 14 13 free to examine him yourself. 15 14 THE COURT: Well, my concern really is with the 16 15 fundamental source of all of his estimations, and that's on 17 16 a strategic business plan that does not -- so I'm going to 18 17 have to go back and look and see whether I think that was an 19 18 appropriate way to start the analysis, and after that, I 19 guess I will try to figure out whether all the different 22 20 ways that the analysis was done and the different kind of 23 21 figures were manipulated --22 MR. TASKIER: In that regard, your Honor, I 25 23 direct your attention to the Lepages case, which explicitly 24 endorses the use of the strategic business plan that was presented for use by the Board of Directors on this for

\$	80:18	2	2008 [4] - 72:15,	37:3, 38:9, 41:17,
	<b>10</b> [5] <b>- 42</b> :19, 62:4,	_	73:21, 73:25, 78:4	42:2, 43:2, 43:14,
	62:6, 62:7, 91:4		<b>2009</b> [22] - 1:12, 9:14,	43:16, 44:3, 44:8,
<b>\$150</b> [1] - 46:3	10-speed [19] - 39:2,	<b>2</b> [8] - 19:5, 60:6, 61: <b>4</b> ,	9:17, 14:17, 18:17,	45:23, 48:22, 49:2,
<b>\$170</b> [1] - 69:9	43:4, 44:23, 45:1,	65:14, 65:22, 69:11,	20:25, 21:15, 23:20,	49:3, 49:4, 55:12,
<b>\$2,700</b> [1] - 47:25	45:4, 46:9, 48:6,	80:18, 101:21	63:3, 71:11, 71:19,	56:18, 58:10, 59:14,
<b>\$200</b> [1] - 65:3	48:12, 49:10, 49:17,	<b>2,000</b> [1] - 12:18	72:3, 72:5, 72:10,	62:20, 62:22, 62:24,
\$245,000,000 [1] -	50:17, 50:22, 50:24,	<b>20</b> [3] - 74:24, 112:11,	73:2, 73:19, 73:22,	63:1, 63:22, 64:4,
69:4	56:20, 56:23, 57:16,	112:13	73:23, 74:6, 76:2,	67:13, 68:8, 70:5,
<b>\$250</b> [1] - 64:24	58:22, 59:1, 122:21	200 [1] - 64:23	76:11, 106:12	70:9, 79:8, 79:10,
<b>\$3,000</b> [2] - 42:23,	10-speeds [5] - 42:17,	2000 [40] - 13:4, 14:4,	<b>21</b> [2] - 62:20, 74:24	80:20, 82:4, 85:19,
46:2	42:23, 49:25, 50:13,	14:6, 14:17, 20:18,	<b>211</b> [4] - 104:22,	106:9, 108:19
<b>\$3,418</b> [1] - 39:18	53:17	20:25, 22:8, 23:20,	105:3, 105:17	<b>50</b> [3] - 46:3, 67:4,
\$384,991,000[2]-	11 [6] - 26:23, 63:9,	43:14, 45:2, 51:10,	<b>22</b> [2] - 1:12, 102:21	67:11
69:2 <b>4</b> , 70:1	63:10, 63:12, 63:13,	53:21, 53:24, 54:13,	<b>2300</b> [3] - 48:2, 48:12,	<b>57</b> [1] - 68:9
<b>\$400</b> [1] - 69:21	71:6	55:12, 63:3, 85:6,	49:10	<b>3.</b> [1] = 33.3
\$450 [3] - 46:24,	11-speed [1] - 49:21	85:20, 90:24, 91:19,		C
47:20, 48:19	113 [1] - 47:4	91:23, 100:10,	<b>240</b> [1] - 116:19	6
\$50 [1] - 28:25	11D <sub>[2]</sub> - 33:8, 34:14	100:21, 101:5,	<b>248</b> [1] - 69:8	
\$66,133,000 [1] - 85:2	<b>11</b> D [2] = 33.8, 34; 14 <b>12</b> [7] = 65:4, 65:10,	102:2, 102:5,	<b>2700</b> [1] - 46:9	<b>6</b> [5] - 38:10, 42:3,
\$75 <sub>[1]</sub> - 46:3		103:13, 103:25,	<b>28</b> [2] - <b>47</b> : <b>4</b> , 47:8	60:1, 62:22, 63:1
' ' '	67:13, 68:8, 69:13,	104:11, 104:14,		<b>6.6</b> [1] - 66:3
<b>\$90</b> [2] - 65:1, 69:9	71:7, 91:4	104:11, 104:14,	3	<b>60</b> [2] - 67:5, 68:10
,	<b>13</b> [6] - 33:9, 49:21,	106:5, 106:20,		60-percent [1] - 70:4
	68:20, 92:4, 92:5,	107:3, 114:19,	<b>3</b> [5] - 62:15, 62:18,	<b>67</b> [1] - 91:24
	103:7	119:8, 119:9	63:11, 63:16, 80:18	01 [1] 01.24
<b>'00</b> [3] - 39:19, 41:18,	13-and-a-half [1] -	2000/2003 [1] - 22:14	<b>3,000</b> [1] - 48:14	7
69:5	28:5	<b>2007</b> [19] - 37:24,	<b>30</b> [1] - 125:13	
<b>'01</b> [11] - 39:19, 41:18,	<b>13-speed</b> [1] - 32:10	47:19, 48:5, 48:13,		
49:25, 53:17, 55:11,	<b>133</b> [1] - 48:25		30(b)(6 [1] - 116:17	<b>7</b> [19] - 42:4, 49:1,
55:17, 56:15, 56:19,	<b>14</b> [1] - 96:9	48:24, 49:10, 50:7,	<b>306</b> [2] - 71:21, 71:22	60:1, 61:14, 62:13,
57:14, 82:11, 83:11	14-speed [2] - 33:10,	55:13, 55:22, 56:5,	309 [2] - 96:9, 96:16	62:15, 62:18, 62:21,
<b>'02</b> [1] - 56:6	49:21	56:12, 57:7, 104:11,	<b>30th</b> [2] - 55:9, 55:13	63:7, 63:10, 63:11,
	<b>143</b> [1] - 36:22	105:11, 106:16,	<b>320</b> [1] - 98:13	63:16, 63:19, 81:25,
<b>'03</b> [5] - 34:19, 62:2, 109:13, 110:11,	<b>145</b> [3] - 61:1, 62:4	107:3, 116:8,	<b>3400</b> [1] - 83:10	83:1, 83:15, 86:7,
111:7	<b>14</b> 7 [2] - 63:9, 65:4	118:15, 121:23	<b>3418</b> [7] - 41:18, 44:5,	86:8, 110:6
	<b>15</b> [2] - 88:17, 112:7	<b>2002</b> [17] - 18:16,	48:24, 49:8, 56:19,	<b>702</b> [1] - 123:6
<b>'04</b> [2] - 68:6, 113:10	15-percent [1] - 43:3	55:23, 101:9,	57:14, 59:7	75-percent [1] - 69:12
<b>'05</b> [3] - 68:6, 75:1,	<b>16</b> [1] - 102:21	105:13, 106:5,	<b>36</b> [1] - 71:22	
75:4	<b>160</b> [1] - 69:9	106:16, 107:6,	<b>3650</b> [2] - 41:19, 44:6	8
<b>'06</b> [2] - 68:6, 73:4	<b>1</b> 7 [6] - 16:2, 42:12,	108:2, 108:21,	<b>3776</b> [3] - 39:19,	
<b>'07</b> [3] - 68:6, 75:1,	44:22, 47:23, 48:11,	109:9, 116:5,	41:19, 44:5	
75:5	85:24	116:11, 116:15,	<b>39</b> [1] - 100:16	<b>8</b> [3] - 60:25, 66:15,
<b>'08</b> [1] - 73:4	<b>17,000</b> [1] - 38:12	117:2, 117:4, 118:9,		100:16
<b>'09</b> [5] - 75:10, 75:16,	<b>17,886</b> [1] - 38:12	118:15	4	<b>8.4</b> [2] - 117:16,
75:19, 75:24	<b>1700</b> [1] - 110:18	2003 [11] - 18:16,		117:20
<b>'99</b> [3] - 100:20, 101:5,	<b>18</b> [1] - 42:11	21:17, 22:8, 32:17,	4 00.0 22.2	80 [2] - 65:1, 69:8
101:9	<b>19</b> [1] - 75:3	33:22, 107:6, 116:5,	<b>4</b> [10] - 38:8, 63:2,	<b>81</b> [2] - 87:22, 89:1
_	19,348 [2] - 37:25,	117:19, 118:1,	80:18, 81:17, 81:18,	<b>84</b> [3] - 42:11, 42:12,
0	84:23	118:4, 118:9	81:20, 81:24, 82:2,	48:11
	<b>196</b> [5] - 87:22, 88:25,	<b>2004</b> [6] - 21:15,	96:9, 125:13	89 [1] - 104:23
<b>06-623</b> [1] - 1:9	92:17, 94:18, 97:19	101:3, 107:6,	<b>4.2</b> [2] - 117:6, 117:7	
<b>09</b> [1] - 69:5	<b>1990</b> [1] - 90:15	112:13, 113:1,	<b>4.4</b> [2] - 121:5, 122:21	9
00 [i] = 00.0	<b>1996</b> [1] - 90:8	113:13	<b>43</b> [1] - 68:9	
4	<b>1990</b> [1] - 90.8 <b>1999</b> [4] - 20:10,	<b>2005</b> [4] - 14:7, 14:17,	<b>445</b> [1] - 101:24	
1	20:17, 101:2, 104:5	74:12, 74:14	<b>477</b> [1] - 54:19	<b>9</b> [40] - 37:11, 39:2,
	1:56 [2] - 1:12, 3:4	2005/2007 [1] - 78:7	<b>4:50</b> [1] - 125:2	41:17, 42:17, 42:19,
<b>1</b> [12] - 42:2, 45:23,	1.00 [2] - 1.12, 3.4	<b>2006</b> [5] - 51:10,		42:23, 43:2, 43:4,
55:8, 59:17, 60:2,		72:15, 73:21, 73:24,	5	44:23, 44:25, 45:4,
60:5, 62:13, 62:15,		78:4		46:9, 48:6, 48:12,
63:10, 63:13, 69:11,	-	<b>200</b> 7 [2] - 74:12, 74:15	From 17:14 20:04	48:22, 49:4, 49:9,
, , ,			<b>5</b> [38] - 17:14, 36:21,	
L	1			

49:17, 49:25, 50:17, 50:22, 50:24, 53:17, 56:18, 56:20, 56:23, 57:16, 58:10, 58:22, 59:1, 59:14, 59:16, 62:24, 63:22, 64:4, 66:23, 79:8, 82:4, 106:16, 122:21

9-speed [1] - 50:13

9.8 [1] - 118:3

# Α

absence [1] - 9:21 absent [8] - 10:14, 13:23, 30:8, 30:18, 37:8, 37:14, 38:1, 121:12 absolutely [2] - 16:8, 77:17 abut [1] - 40:9 accept [1] - 124:12 accepted [2] - 8:4, 12:22 accommodate [1] -50:19 accompanying [2] -51:9, 87:3 according [1] - 92:6 accordingly [1] - 46:7 account [28] - 13:1, 14:17, 18:15, 21:23, 76:8, 76:9, 84:14, 96:22, 97:3, 97:7, 97:18, 97:22, 97:25, 100:8, 103:11, 103:12, 103:16, 103:19, 108:14, 108:18, 111:24, 113:11, 113:18, 118:20, 118:22, 119:4, 124:14 accounted [5] - 21:13, 21:19, 56:10, 98:1, 118:23 accounting [1] - 9:22 accounts [2] - 100:10, 108:6 accruals [1] - 116:7 accrued [1] - 29:14 accurate [1] - 11:21 accuses [1] - 16:4 achieve [1] - 27:3 action [3] - 93:11, 101:17, 103:23 ACTION [1] - 1:4 activities [1] - 111:16 actual [45] - 6:1, 14:11, 14:12, 14:15,

15:6, 16:1, 16:5, 18:9, 20:24, 21:2, 22:15, 23:16, 23:20, 24:3, 30:21, 30:23, 30:24, 36:13, 38:8, 38:9, 38:14, 42:18, 43:3, 43:18, 43:19, 44:22, 44:25, 45:3, 48:12, 48:13, 49:9, 64:13, 64:18, 65:2, 66:13, 66:17, 79:22, 79:24, 83:9, 85:18, 85:20, 108:5, 111:9, 115:20, 117:1 actuals [5] - 43:13, 43:15, 59:2 add [3] - 64:19, 66:16, 76:7 added [3] - 62:1, 63:2, 82:9 adding [1] - 118:24 addition [1] - 39:6 additional [30] -17:18, 21:14, 21:20, 21:24, 22:7, 22:9, 39:5, 40:23, 44:9, 46:24, 48:8, 49:14, 49:18, 50:11, 51:16, 55:18, 56:24, 57:6, 57:15, 58:1, 59:18, 59:21, 62:1, 63:2, 98:2, 120:5, 123:11, 124:20 address [2] - 104:20, 121:8 adequate [2] - 7:12, 13:17 adjust [1] - 106:8 adjusted [1] - 106:23 adjusting [1] - 80:1 adjustment[1] -119:11 adjustments [1] - 52:4 adopt[1] - 120:5 advance [1] - 98:20 advanced [1] - 107:16 affected [5] - 14:19, 22:2, 74:22, 83:22, 122:4 aftermarket [9] -39:22, 40:22, 44:10, 48:9, 49:14, 50:10, 50:12, 58:3, 82:9 afterwards [1] - 56:6 aggregate [6] - 60:5, 81:10, 112:1, 116:13, 121:10, 121:11

aggregated [1] - 85:21

aggregating [1] - 64:1

aggregation [2] -34:22, 34:23 aggressive [1] -103:23 ago [2] - 75:11, 77:9 agree [5] - 43:1, 43:6, 43:7, 72:19, 72:22 agreement[1] - 90:21 agreements [1] -122:4 ahead [2] - 41:15, 113:7 allegation [1] - 16:6 allegedly [5] - 30:9, 30:19, 37:8, 37:15, 108:9 allocation [1] - 69:2 allotted [2] - 95:22, 95:25 allow [1] - 108:11 allows [4] - 11:14, 11:16, 11:18, 14:17 almost [2] - 56:20, 88:4 alternative [11] - 5:16, 20:8, 21:20, 23:9, 26:14, 28:13, 51:13, 61:16, 64:17, 71:16 alternatives [1] -26:25 amortization [2] -27:21, 28:22 amount [4] - 35:25, 91:9, 101:1, 116:9 analyses [2] - 5:15, 124:13 analysis [39] - 5:6, 7:2, 7:3, 7:20, 7:22, 7:24, 8:8, 8:15, 10:9, 15:16, 19:5, 19:16, 24:15, 32:3, 35:10, 35:21, 36:9, 53:9, 53:10, 73:6, 73:16, 87:19, 87:20, 96:7, 100:8, 100:9, 103:10, 103:13, 112:1, 112:2, 114:2, 114:3, 115:19, 119:23, 119:24, 122:19, 123:7, 123:18, 123:20 analyst [1] - 25:18 analysts [2] - 26:16, 26:18 analyze [1] - 13:11 analyzed [6] - 6:21, 7:6, 7:9, 8:1, 8:16,

annual [1] - 29:9 answer [7] - 31:25, 32:15, 52:18, 52:22, 87:1, 98:18, 117:17 Answer [10] - 96:24, 99:14, 99:17, 99:20, 99:23, 117:5, 117:8, 117:21, 117:24, 118:5 answers [2] - 39:9, 95:23 anti [3] - 6:25, 7:18, 7:19 anti-competitive [3] -6:25, 7:18, 7:19 anticompetitive [24] -5:2, 6:11, 6:16, 7:4, 7:23, 8:5, 8:25, 9:2, 9:22, 10:14, 11:8, 13:23, 14:21, 14:23, 30:9, 30:18, 30:20, 31:24, 37:8, 37:15, 92:24, 94:1, 108:9, 120:14 antitrust [7] - 5:3, 5:19, 7:1, 7:3, 7:24, 10:6, 10:9 apologize [1] - 40:14 appear [2] - 38:25, 118:14 APPEARANCES [2] -1:16, 2:1 appeared [1] - 123:5 Appendix [1] - 74:13 appendix [1] - 74:24 apples [7] - 17:9. 17:10, 49:12, 49:13, 59:3, 77:18 apples-to-apples [1] -59:3 apples-to-bicycles [1] - 77:18 application [3] -14:12, 57:6, 58:21 applications [1] - 33:6 applied [21] - 14:4, 15:15, 20:23, 23:22, 24:6, 25:13, 27:8, 28:18, 30:7, 33:6, 35:5, 36:13, 38:5, 38:13, 38:14, 44:10, 48:20, 53:12, 79:22, 83:8 applies [3] - 25:22, 46:11, 46:12 apply [5] - 6:1, 6:6, 25:22, 28:17, 72:13 applying [1] - 46:6

appreciate [4] - 29:20,

96:4, 112:9, 122:25

approach [14] - 4:12, 25:14, 25:16, 25:17, 26:18, 26:19, 27:12, 27:16, 28:24, 28:25, 29:2, 74:22, 120:4 approaches [1] -60:19 approaching [1] -11:22 appropriate [13] -27:14, 49:15, 63:24, 73:16, 74:7, 76:5, 77:25, 97:6, 99:2, 107:8, 122:23, 123:18 appropriately [1] -20:5 approvals [1] - 105:19 approved[1] - 87:15 approximate [1] -67:10 arising [1] - 115:2 arithmetic [1] - 43:6 Arizona [1] - 110:17 arrive [2] - 6:1, 15:18 ARSHT [1] - 2:9 art[1] - 30:12 ArvinMeritor [5] -26:5, 26:9, 74:2, 83:19, 110:5 aspects [1] - 90:23 assertion [2] - 6:4, 6:9 assess [3] - 4:25, 15:16, 25:19 assessed [2] - 35:24, 36:3 assessing [2] - 6:25, 7:4 assessment [4] -35:18, 36:6, 64:10, 79:15 associated [3] -119:6, 120:1, 120:18 assume [10] - 34:18, 37:24, 52:19, 67:1, 67:4, 82:11, 83:10, 84:23, 85:14, 92:19 assumed [5] - 34:13, 51:25, 53:15, 57:13, 70:25 assuming [6] - 27:23, 66:7, 71:10, 71:17, 76:22, 120:13 assumption [14] -45:12, 52:11, 52:13, 52:14, 52:15, 56:8, 59:5, 59:8, 61:18, 61:23, 73:7, 84:8, 86:2

2

ANDREW [1] - 2:13

115:22

AND [1] - 1:2

assumptions [34] -

13:18, 24:22, 33:14, 50:4, 52:8, 52:10, 52:16, 52:17, 52:21, 53:2, 58:9, 62:24, 62:25, 63:23, 64:15, 78:10, 80:19, 81:6, 81:9, 81:15, 81:16, 81:19, 82:4, 82:16, 82:20, 83:4, 83:5, 83:7, 83:13, 83:14, 84:6, 84:10, 85:9, 89:19 assurance [1] - 29:1 attach [1] - 25:13 attempts [2] - 92:7 attention [1] - 123:23 attributable [1] -119:14 attribute [1] - 101:8 attributes [1] - 103:1 audit [1] - 43:18 audited [4] - 15:7, 43:18, 85:20, 85:21 auto [5] - 72:23, 78:1, 103:7, 114:12, 114:13 autocorrelation [1] -20:6 automatically [1] -63:23 automation [11] -38:23, 38:25, 49:19, 55:19, 56:24, 56:25, 58:1, 58:2, 58:20, 81:12 automobile [1] - 77:25 available [19] - 11:17, 11:24, 12:15, 12:16, 23:24, 51:6, 51:24, 52:24, 56:14, 57:20, 60:20, 73:14, 74:17, 80:9, 87:9, 99:2, 115:17 average [39] - 11:19, 12:1, 18:5, 37:13, 39:11, 39:15, 39:18, 39:21, 40:18, 41:17, 42:3, 42:10, 42:16, 42:22, 43:2, 45:7, 46:8, 46:17, 46:21, 46:24, 47:2, 47:5, 47:9, 47:19, 48:1, 48:5, 48:23, 49:6, 49:8, 56:19, 57:14, 59:7, 59:13, 59:15, 72:15, 122:10, 122:13, 122:21 averaged [2] - 18:4, 25:4 aware [5] - 5:25, 6:5,

16:4, 16:6, 104:4

В bad [2] - 29:3, 111:3 balances [1] - 11:15 barrier [1] - 94:6 barriers [2] - 6:22, 6:23 base [1] - 72:12 based [33] - 19:9, 32:21, 45:17, 50:16, 51:23, 52:20, 53:18, 62:17, 64:12, 65:6, 66:8, 68:25, 69:2, 69:5, 71:4, 71:6, 80:5, 80:6, 82:23, 84:9, 84:11, 86:5, 99:1, 107:7, 107:9, 111:13, 111:20, 117:8, 123:10, 124:20 basic [1] - 10:9 basis [31] - 13:21, 15:14, 16:21, 17:17, 18:5, 18:14, 18:17, 29:10, 29:11, 36:12, 39:17, 50:18, 52:5, 53:15, 57:5, 72:18, 76:11, 82:25, 86:5, 86:20, 87:14, 103:13, 106:6, 112:3, 114:2, 114:4, 116:13, 118:14, 119:24, 124:2, 124:12 bay [1] - 5:4 bear [9] - 39:8, 47:7, 47:11, 64:25, 73:17, 81:22, 86:23, 91:21, 106:13 bearing [1] - 24:13 BEFORE [1] - 1:14 beginning [8] - 3:4, 12:17, 13:5, 19:19, 20:9, 91:24, 97:25, 104:24 begins [2] - 91:25, 102:4 behalf [1] - 116:18 behind [1] - 86:3 below [8] - 18:23, 18:24, 39:18, 42:9, 59:23, 94:21, 121:21, 121:24 benchmark [6] -

27:21, 28:8, 64:8,

68:2, 72:16, 76:4

best [1] - 88:19

better [1] - 29:21 between [22] - 17:22, 28:9, 36:3, 50:13, 67:7, 70:9, 83:18, 87:6, 89:16, 90:21, 91:8, 93:5, 93:6, 93:17, 95:2, 96:22, 97:5, 97:8, 102:20, 114:8, 114:21, 116:5 bicycles [3] - 17:10, 49:13, 77:18 BIDDLE [1] - 1:18 big [1] - 48:18 bill [1] - 97:22 binding [1] - 90:17 bit [10] - 37:16, 40:14, 45:3, 46:2, 88:15, 110:19, 113:23, 117:15, 117:25, 120:19 black [2] - 42:16, 47:9 blend [1] - 39:3 block [1] - 71:18 blow [1] - 71:22 blue [4] - 44:22, 100:17, 102:24, 121:24 Board [11] - 12:19, 12:22, 13:5, 53:25, 81:1, 81:3, 83:16, 83:17, 87:5, 87:14, 123:25 board [9] - 85:24, 86:19, 101:10, 102:2, 102:12, 102:14, 103:17, 110:21 boards [1] - 4:4 book [3] - 93:11, 93:12, 93:13 bottom [4] - 66:23, 86:8, 86:11, 105:3 bound [2] - 22:17, 65:18 break [4] - 19:17, 50:12, 51:19, 88:4 break-out [1] - 50:12 brief [1] - 3:16 briefly [2] - 6:19, 10:8 bring [11] - 3:11, 36:22, 54:3, 65:4, 78:16, 78:19, 78:20, 78:24, 95:12, 95:17, 109:3 brought [2] - 18:16, 75:14 BRUCE [1] - 2:4

12:24, 13:1, 13:7, 13:10, 13:11, 13:16, 13:17, 13:19, 13:21, 14:4, 14:10, 15:2, 15:13, 15:19, 16:1, 19:13, 22:25, 23:4, 23:7, 23:11, 24:2, 24:6, 24:20, 24:23, 25:23, 26:21, 28:4, 35:12, 36:10, 36:12, 37:18, 38:4, 38:14, 38:17, 39:16, 40:2, 40:25, 50:8, 51:6, 51:7, 51:10, 51:11, 51:13, 51:18, 52:1, 52:3, 52:25, 53:3, 53:6, 53:11, 57:7, 58:17, 70:15, 70:19, 70:22, 71:10, 72:2, 72:6, 72:10, 73:2, 73:20, 73:21, 77:3, 77:4, 77:19, 77:25, 78:11, 78:13, 84:22, 85:10, 103:6, 103:14, 104:13, 104:14, 106:21, 123:16, 123:24, 124:13 businesses [7] - 74:2, 74:6, 74:9, 74:14, 74:19, 75:1, 77:19 but-for [147] - 9:18, 10:13, 11:3, 11:12, 11:13, 12:8, 13:22, 14:20, 15:21, 15:22, 15:25, 16:5, 18:9, 18:12, 19:9, 19:14, 20:15, 20:21, 21:2, 21:4, 22:10, 22:21, 23:2, 23:22, 24:9, 24:11, 25:24, 27:19, 28:20, 30:7, 30:11, 30:16, 31:3, 31:9, 31:15, 32:1, 32:4, 32:6, 32:11, 32:14, 32:17, 32:24, 33:21, 34:13, 35:4, 35:5, 35:8, 35:12, 35:16, 35:19, 36:9, 36:13, 37:13, 38:10, 38:13, 39:11, 39:12, 39:18, 39:25, 40:4, 40:5, 40:18, 41:17, 42:10, 42:20, 43:2, 43:16, 43:17, 44:5, 46:1,

14:16, 20:25

bulk [1] - 32:24

buried [1] - 53:4

business [83] - 12:6,

12:8, 12:14, 12:16,

48:22, 49:6, 49:8, 50:1, 51:3, 51:20, 51:23, 52:1, 52:15, 52:20, 53:16, 57:11, 57:12, 58:10, 59:5, 59:13, 59:15, 61:11, 61:19, 61:20, 62:23, 64:11, 64:21, 64:22, 65:2, 65:7, 65:20, 66:8, 66:14, 66:17, 67:1, 67:9, 67:21, 68:4, 68:8, 68:10, 71:5, 71:17, 72:7, 73:7, 73:24, 76:12, 77:5, 78:5, 78:6, 78:9, 78:10, 79:7, 79:12, 79:16, 79:21, 79:23, 80:2, 80:12, 80:13, 80:18, 81:19, 103:10, 105:25, 106:1, 106:3, 106:9, 106:11, 106:19, 108:3, 111:7, 113:12, 118:11, 118:22, 119:1, 119:3, 121:9 buy [2] - 122:3, 122:20 buyer [5] - 47:3, 47:24, 72:5, 73:8, 77:12 buyers [6] - 41:25, 46:13, 46:18, 46:25, 47:6, 47:20 buying [2] - 111:5, 111:10 BY [28] - 1:18, 2:3, 2:9, 2:13, 4:19, 5:24, 30:4, 34:12, 36:20, 37:2, 41:16, 47:18, 54:7, 79:5, 82:1, 88:24, 89:4, 96:5, 96:18, 100:1, 101:25, 106:18, 109:7, 110:16, 112:16, 113:8, 118:7, 120:22

3

# С

calculable [1] - 53:3 calculate [6] - 9:3, 10:10, 10:22, 14:2, 25:1, 70:24 calculated [10] - 9:25, 10:12, 18:12, 21:9, 25:10, 29:5, 29:7, 46:16, 60:10, 65:7 calculating [6] -10:17, 13:20, 24:21, 29:14, 30:12, 37:4

builds [2] - 79:24,

built [4] - 14:13,

98:3

calculation [23] - 9:24, 11:23, 15:23, 16:19, 22:2, 27:7, 28:14, 30:13, 31:13, 39:17, 42:8, 49:15, 53:13, 58:15, 58:16, 61:3, 62:7, 64:6, 69:15, 70:11, 78:13, 80:5, 122:24 calculations [7] -10:19, 10:20, 10:21, 15:14, 15:18, 66:25, 68:21 calendar [1] - 55:8 capital [5] - 28:4, 28:7, 28:9, 51:17, 77:21 captured [1] - 77:23 car [2] - 41:1 care [1] - 44:4 careful [3] - 31:4, 34:21, 48:15 case [20] - 4:21, 4:25, 5:10, 9:4, 9:12, 10:4, 10:6, 10:10, 15:23, 17:2, 25:23, 29:12, 32:2, 36:5, 57:21, 98:10, 105:22, 106:6, 123:23, 124:1 cases [2] - 7:1, 7:15 cash [7] - 27:11, 27:23, 28:8, 28:10, 28:11, 77:3 category [2] - 33:24, 40:21 causation [2] - 87:19 caused [9] - 6:2, 8:17, 11:8, 11:9, 94:12, 108:14, 119:20, 120:11, 121:19 causes [4] - 88:22, 89:6, 89:11 caveat [1] - 48:18 caveats [3] - 49:5, 59:9, 101:1 certain [5] - 7:10, 52:4, 53:2, 94:5, 109:18 certainly [15] - 16:10, 20:23, 24:7, 24:14, 29:23, 35:24, 36:8, 46:5, 74:22, 76:10, 90:24, 95:14, 95:17, 98:22 CFO [2] - 12:22, 82:19 chairman [1] - 110:21 challenge [1] - 5:17 challenged [1] - 5:12 change [3] - 82:22, 109:12, 112:24 changed [1] - 83:13

changes [4] - 84:1, 91:11, 92:5, 114:16 characterization [4] -5:22, 17:7, 38:15, 43:7 characterize [2] -45:6, 68:13 characterized [1] -43:22 characterizing [3] -70:17, 73:6, 73:17 charged [3] - 16:5, 44:25, 58:19 charges [3] - 117:15, 117:19, 118:2 chart[1] - 20:20 check [3] - 27:6, 86:13 checked [2] - 86:17, 86:21 cherry [2] - 29:3, 98:19 cherry-picked [1] -29:3 cherry-picking [1] -98:19 choose [1] - 29:13 chose [8] - 29:15, 73:3, 74:13, 74:14, 80:9, 82:15, 84:5, 96:25 CHRISTOPHER [1] -2:5 cited [2] - 76:5, 76:7 CIVIL [1] - 1:4 claims [2] - 104:24, 105:4 clarify [1] - 38:16 Class [2] - 80:1, 96:21 clear [24] - 33:11, 35:17, 37:16, 39:24, 45:18, 47:15, 55:25, 56:2, 57:2, 67:16, 68:7, 72:9, 80:11, 89:23, 90:8, 90:11, 90:14, 105:18, 106:3, 115:4, 115:18, 116:14, 121:18 clearly [1] - 87:10 clip [3] - 96:12, 98:9, 117:11 clock [1] - 88:14 closely [1] - 120:2 co [2] - 115:1, 115:5 co-efficients [2] -115:1, 115:5 column [5] - 38:20, 49:25, 55:11, 55:16,

117:6

columns [1] - 38:19

combined [1] - 18:2 comfort [1] - 26:12 comfortable [1] -124:16 coming [2] - 50:5, 50:7 commenced [1] - 3:3 commensurate [1] -60:3 communication [1] -111:20 companies [14] -25:19, 25:20, 26:6, 26:11, 26:17, 26:20, 26:23, 45:10, 74:12, 74:20, 75:4, 75:15 Company [1] - 86:9 company [41] - 12:22, 13:6, 13:16, 14:15, 15:9, 22:15, 26:7, 26:9, 27:11, 28:4, 33:21, 34:14, 37:7, 37:24, 38:18, 39:12, 39:25, 43:4, 52:1, 52:3, 55:2, 55:5, 57:10, 64:10, 80:25, 82:19, 83:19, 87:15, 101:12, 102:14, 104:23, 106:10, 109:14, 109:15, 111:2, 116:9, 116:17, 116:18, 116:20, 120:8 company's [12] -13:10, 15:7, 65:7, 89:7, 90:2, 102:7, 103:6, 111:10, 114:8, 115:20, 116:4, 116:19 company's' [1] - 97:5 comparable [16] -25:18, 25:20, 26:11, 26:16, 37:22, 43:8, 43:21, 50:23, 74:2, 74:6, 74:14, 74:25, 75:15, 76:23, 86:5 comparables [6] -25:17, 26:4, 26:15, 29:3. 76:15 compare [5] - 42:2, 43:12, 43:19, 45:25, 90:8 comparing [2] - 17:11, 57:24 comparison [7] -17:10, 44:1, 46:4, 49:13, 59:3, 77:18 competing [1] - 7:12 competition [4] - 6:3,

competitive [7] - 6:25, 7:18, 7:19, 30:20. 30:23, 48:16, 67:2 competitively [1] -89:13 competitor [3] -10:10, 11:10, 33:8 complaining [1] -93:14 complete [1] - 74:11 completed [1] - 88:17 completely [3] -45:18, 76:7, 81:4 comply [3] - 89:25, 92:2, 92:8 component [1] - 9:14 components [1] -112:25 comprehend [1] -24:15 comprise [1] - 40:9 comprised [1] - 67:21 comprises [1] - 18:3 computation [7] -19:1, 20:19, 21:13, 37:10, 38:16, 71:3, 71:16 computational [1] -37:21 computations [7] -10:25, 12:9, 21:5, 23:2, 33:15, 52:5, 85:1 computed [2] - 17:17, 18:14 computer [1] - 124:25 computing [4] - 10:4, 42:20, 79:21 concept [1] - 41:8 concern [7] - 9:16, 25:12, 26:1, 27:3, 27:10, 77:2, 123:14 concerned [1] - 104:5 concerns [2] - 29:22, 77:22 concession [1] -47:20 conclude [7] - 20:13, 93:23, 93:25, 94:1, 94:2, 94:6, 110:2 concluded [12] - 8:18, 9:1, 9:11, 20:12, 52:4, 90:20, 91:2, 93:3, 107:8, 107:24, 114:15, 119:10 conclusion [8] - 5:18. 6:2, 6:7, 6:15, 8:24, 11:7, 19:3, 98:6 conclusions [3] -

5:12, 67:19, 98:25

conditional [1] - 47:16 conditions [1] - 94:12 conduct [53] - 4:25. 5:1, 5:5, 6:2, 6:10, 6:11, 6:13, 6:15, 6:21, 6:25, 7:4, 7:6, 7:8, 7:12, 7:18, 7:23, 7:25, 8:4, 8:9, 8:16, 8:24, 9:22, 9:23, 10:14, 11:8, 12:17, 13:23, 14:23, 19:19, 20:9, 20:13, 27:2, 30:9, 30:18, 30:20, 31:18, 31:22, 31:24, 32:3, 36:15, 37:8, 37:15, 38:2, 91:8, 92:25, 98:1, 101:3, 108:5, 108:9, 120:14, 120:15, 121:12, 121:13 conducted [4] - 6:20, 7:17, 8:7, 8:14 conducts [1] - 14:21 confidence [1] - 98:4 confirm [1] - 28:13 confirmed [2] - 26:14, 26:24 confirming [1] - 19:13 confounding [1] -122:7 confuse [1] - 124:8 confused [1] - 40:3 confusing [1] - 40:15 consequence [1] - 5:4 consequences [1] -31:24 conservative [3] -23:17, 86:12, 103:14 consider [6] - 11:16, 11:20, 22:14, 32:22, 33:2, 67:20 consideration [4] -31:7, 76:6, 84:21, 97:10 considerations [1] -77:6 considered [2] - 86:4, 90:20 considering [1] -83:25 consistency [1] -62:25 consistent [5] - 15:5, 15:8, 16:21, 87:16, 109:20 constant [1] - 108:5 constraints [2] -77:21, 108:11 construct [1] - 11:25

4

84:3, 93:1, 93:18

constructed [2] -

15:16, 19:21 consumer [1] - 98:4 contemporaneous [1] - 13:13 contemporaneously [3] - 14:6, 76:25, 101:12 contends [2] - 5:25, 6:5 context [1] - 9:19 continue [5] - 40:8, 88:11, 96:1, 108:22, 109:10 continued [4] -104:10, 104:14, 105:8, 105:13 Continued [1] - 2:1 continuing [1] -109:19 contract [7] - 91:15, 91:18, 91:19, 92:9, 92:10, 92:12, 93:18 contracts [10] - 91:4, 91:6, 91:10, 91:21, 92:25, 93:18, 100:23, 101:5, 121:12 contributed [1] -103:2 contribution [1] -13:25 convenience [1] -33:1 convert [1] - 111:17 convincing [1] -107:25 copies [2] - 36:18, 87:8 copy [9] - 34:6, 54:3, 54:4, 78:15, 78:16, 95:12, 109:4, 110:14 core [1] - 19:19 CORPORATION [2] -1:5, 1:8 Corporation [1] - 3:24 correct [131] - 3:23, 4:21, 10:2, 14:11, 17:1, 18:21, 19:6, 22:5, 22:13, 23:12, 23:13, 24:5, 25:2, 25:3, 25:5, 25:6, 25:9, 27:5, 29:8, 30:22, 31:11, 32:2, 32:4, 35:7, 35:22, 37:5, 41:5, 41:20, 41:25, 42:1, 42:7, 42:15, 42:24, 42:25, 43:5, 44:7, 45:5, 45:7, 45:8, 45:24, 46:15, 46:19, 47:22,

48:8, 54:15, 54:18, 55:7, 55:10, 55:14, 60:24, 61:6, 61:10, 61:14, 61:15, 62:3, 62:10, 62:14, 62:16, 62:17, 63:5, 63:8, 63:17, 64:5, 64:9, 65:13, 66:6, 66:24, 68:19, 68:23, 69:23, 70:2, 70:20, 70:23, 71:8, 71:25, 72:4, 72:21, 72:25, 74:4, 74:16, 75:2, 75:7, 75:12, 75:13, 75:21, 79:10, 79:14, 79:18, 81:20, 83:7, 89:14, 89:15, 89:17, 89:18, 89:21, 90:2, 90:3, 92:13, 92:15, 94:22, 94:25, 96:7, 96:24, 97:2, 97:16, 97:20, 99:14, 99:17, 100:15, 100:18, 100:22, 101:7, 102:24, 102:25, 103:4, 103:8, 103:9, 104:15, 104:16, 105:7, 105:9, 105:10, 105:12, 105:14, 105:19, 106:12, 106:22, 106:25, 107:7, 112:1, 118:4 corrective [1] - 101:17 correlated [1] - 115:23 correlating [1] -115:19 correlation [7] -91:11, 114:8, 114:21, 114:25, 115:16, 115:24, 116:2 correspond [2] -73:10 corresponding [2] -18:7, 92:6 correspondingly [1] -58:4 cost [20] - 8:9, 13:25, 15:19, 18:20, 18:25, 23:6, 28:4, 28:6, 28:9, 36:6, 39:1, 42:3, 42:5, 49:19. 49:23, 50:23, 58:5, 61:19 costs [27] - 7:7, 7:9, 15:2, 15:22, 16:20, 21:15, 21:19, 21:22,

21:24, 22:8, 22:9,

22:11, 23:4, 23:5,

23:19, 36:4, 59:4, 60:1, 60:3, 62:2, 63:1, 63:3, 63:21, 107:25, 119:11, 120:8 Counsel [2] - 2:7, 2:16 counsel [3] - 3:22, 124:23, 124:24 count[1] - 6:17 counted [1] - 40:25 counterdesignated [1] - 98:20 Country[1] - 112:14 couple [3] - 34:2, 40:13, 112:5 course [1] - 3:17 COURT [46] - 1:1, 3:6, 3:13, 3:20, 4:1, 4:6, 4:13, 4:16, 5:23, 29:21, 29:25, 34:11, 36:19, 37:1, 40:3, 40:7, 40:16, 41:3, 41:12, 41:15, 54:6, 78:17, 78:19, 78:21, 78:25, 79:3, 88:1, 88:3, 88:6, 88:11, 88:16, 95:14, 95:17, 95:21, 96:14, 98:22, 109:6, 110:15, 112:7, 112:10, 123:2, 123:4, 123:14, 124:4, 124:11, 124:25 Court [7] - 1:24, 4:17, 44:2, 54:5, 79:1, 123:11, 125:2 Court) [2] - 109:5, 110:14 courtroom [1] - 3:3 courts [2] - 59:10,

- 62:17 cup [1] - 87:25 current [6] - 41:8, 41:9, 62:12, 63:13, 83:21, 83:22 customer [13] - 85:8, 111:4, 111:9, 112:3, 114:2, 114:4, 115:13, 119:24, 120:3, 120:17 customer-bycustomer [3] - 112:3, 114:2, 119:24 customers [14] - 7:20, 8:11, 31:5, 31:18, 31:21, 93:7, 109:11, 111:14, 111:17, 113:18, 118:11, 118:21, 122:3, 122:19 customers' [1] -114:23 cycle [1] - 72:23

# D

cyclical [1] - 72:20

D.C [2] - 2:5, 2:14 damage [10] - 15:23, 16:19, 24:10, 30:12, 39:17, 58:15, 64:21, 69:7, 69:14, 122:24 damages [64] - 5:3, 9:3, 9:6, 9:7, 9:10, 9:11, 9:14, 9:20, 10:1, 10:2, 10:4, 10:6, 10:20, 11:16, 11:21, 11:22, 11:25, 16:22, 17:4, 18:4, 18:10, 18:18, 18:21, 19:3, 19:20, 21:9, 21:20, 22:1, 22:3, 25:1, 29:4, 29:5, 29:6, 29:7, 29:10, 31:13, 32:3, 34:22, 35:10, 49:15, 53:13, 57:21, 58:16, 60:17, 64:23, 67:25, 69:7, 69:15, 70:7, 70:8, 87:18, 100:8, 100:24, 101:6, 108:3, 114:3, 119:13, 119:19, 119:23, 120:9, 120:10, 121:3, 122:8, 122:18 dams [1] - 29:14 data [33] - 11:17, 20:7, 23:8, 35:1, 35:25,

43:8, 43:9, 43:21,

44:17, 45:18, 51:23, 60:19, 60:20, 64:17, 67:19, 80:6, 80:7, 82:11, 89:23, 91:10, 91:11, 93:11, 93:12, 93:13, 105:19, 107:23, 108:11, 114:18, 115:16, 116:6, 122:13, 122:17 database [3] - 42:18, 44:18, 122:14 databases [1] - 26:19 date [8] - 9:16, 18:17, 71:15, 71:17, 71:19, 73:9, 117:16, 117:20 dates [2] - 51:12, 73:18 Daubert[1] - 123:7 **DAVID** [2] - 4:9, 125:13 days [1] - 124:22 deal [1] - 111:15 dealership [1] - 41:1 dealing [1] - 16:24 debt [2] - 18:20, 18:25 December [2] -108:21, 109:9 decide [2] - 76:18. 76:20 decided [2] - 29:12, 122:20 decision [1] - 124:21 decisions [4] - 12:23, 86:20, 87:15, 120:17 decline [22] - 13:5, 84:8, 84:10, 91:3, 92:20, 99:13, 99:15, 100:3, 100:5, 100:7, 100:20, 101:4, 101:9, 101:14, 102:8, 106:23, 108:1, 114:20, 115:23, 118:15, 118:18, 119:7 declined [3] - 99:18, 99:20, 116:7 decrease [2] - 102:23, 103:5 decreased [1] -102:22 deduct [5] - 46:8, 48:2, 105:25, 107:1, 107:3 deducted [7] - 41:23, 41:24, 44:15, 47:24, 48:17, 82:8, 120:7

5

94:3

cover[1] - 88:20

creator [1] - 52:8

24:12, 24:18

125:12

CROSS-

30:3

- 99:3

98:23

CROSS [2] - 30:3,

cross [3] - 62:17,

**EXAMINATION** [1] -

cross-examination [1]

cross-examined [1] -

cross-referencing [1]

98:23, 99:3

criticism [1] - 24:13

criticisms [3] - 5:15.

created [4] - 42:13,

51:20, 85:14, 115:8

deemed [1] - 24:16

Defendant [2] - 1:9,

2:16

defendant [3] - 29:22, 95:21, 95:24 defendant's [3] - 3:21, 7:6, 91:3 define [3] - 5:2, 25:18, 65:23 definition [3] - 5:7, 5:14, 5:16 definitively [1] -111:12 **DELAWARE** [1] - 1:2 Delaware [1] - 1:11 delay [1] - 8:9 demand [1] - 14:19 Dennis [3] - 112:15, 112:17, 112:23 denominator[1] deposed [1] - 86:23 deposition [25] -16:12, 17:3, 17:25, 31:17, 32:20, 33:12, 35:2, 54:9, 68:12, 95:6, 95:11, 95:19, 96:7, 96:12, 96:16, 98:9, 98:13, 98:17, 99:9, 99:25, 110:8, 112:20, 116:17, 116:23, 117:12 depreciation [3] -23:19, 27:20, 28:21 DeRamus [49] - 3:11, 4:9, 4:20, 5:25, 29:17, 30:5, 30:6, 32:5, 32:13, 34:7, 36:16, 37:3, 39:8, 42:12, 43:22, 44:4, 47:6, 50:1, 51:1, 53:14, 54:8, 54:23, 58:6, 60:15, 72:19, 73:17, 75:18, 76:14, 78:8, 87:10, 87:18, 88:25, 92:9, 93:20, 94:9, 95:6, 96:6, 98:6, 98:17, 100:13, 101:8, 101:21, 104:10, 108:3, 116:4, 118:19, 119:12, 122:9, 123:5 DERAMUS[1] -125:13 DeRamus' [1] - 65:22 derive [5] - 11:18, 23:25, 64:19, 82:11, 83:8 derived [12] - 22:24, 23:3, 23:11, 28:5, 32:9, 42:18, 43:9, 44:18, 62:21, 74:21, 80:16, 85:3

described [4] - 14:1, 16:13, 30:15, 94:10 describes [1] - 92:5 description [2] - 9:25, 71:23 descriptions [1] -26:22 desire [1] - 92:11 Detail [1] - 86:9 detail [3] - 16:13, 52:6, 89:22 detailed [1] - 114:3 details [5] - 10:25, 17:19, 50:4, 51:8, 53:4 determination [3] -32:1, 79:12, 123:12 determinative [1] -89:6 determine [10] - 5:6, 5:9, 6:10, 7:17, 19:16, 20:5, 27:21, 71:14, 77:25, 98:25 determined [3] -26:22, 74:19, 79:7 determining [5] -30:7, 36:6, 92:22, 92:23, 123:7 developed [4] - 53:2, 55:2, 55:21, 81:2 developing [2] - 33:7, 86:3 developments [1] -94:14 devised [1] - 14:15 **DICKSTEIN [1] - 2:2** differ [1] - 22:6 difference [6] - 17:22, 19:18, 28:9, 36:3, 43:20 differences [9] -10:24, 17:20, 27:13, 64:15, 89:16, 95:1, 95:2, 97:4, 97:8 different [44] - 6:16, 11:5, 11:14, 17:13, 17:14, 17:17, 21:18, 28:17, 38:19, 39:3, 39:4, 40:13, 43:9, 44:10, 49:16, 50:3, 50:5, 59:2, 59:6, 60:11, 60:19, 70:25, 72:7, 77:5, 77:16, 77:17, 80:6, 80:7, 80:12, 90:14, 90:15, 90:16, 90:23, 91:4, 91:12, 94:3, 101:18, 114:16, 119:25, 123:19, 123:20

differentials [1] -

94:13 difficulties [1] - 93:3 digits [1] - 54:20 diligence [1] - 13:18 **DIRECT**[2] - 4:18, 125:12 direct [3] - 3:16, 31:21, 123:23 direction [3] - 82:19, 84:1, 103:17 directionally [4] -85:4, 85:9, 85:17, 86:2 Directors [11] - 12:19, 12:23, 13:6, 54:1, 81:1, 81:3, 83:16, 83:17, 87:5, 87:14, 123:25 directors [1] - 86:19 disaggregate [1] -35:1 disagree [1] - 73:5 discount [2] - 18:20, 27:14 discounts [4] - 31:20, 47:24, 72:13, 82:8 discrepancy [1] - 87:6 discuss [1] - 102:19 discussed [10] - 3:6, 16:12, 21:5, 22:22, 28:18, 32:20, 33:12, 68:12, 90:6, 91:23 discusses [3] - 91:25, 92:2 discussing [1] - 110:5 discussion [8] -24:11, 31:19, 83:18, 83:22, 91:25, 101:10, 102:4, 103:16 discussions [3] -85:24, 102:6, 104:4 dislocation [1] - 76:10 dislocations [3] -11:7, 73:12, 77:20 dissolution [1] -113:15 dissolved [2] - 21:17, 113:14 distinction [2] - 67:6, 91:7 **DISTRICT** [2] - 1:1, 1:2 divide [1] - 38:5 divided [5] - 35:14. 37:19, 40:2, 47:17, 59:11 dividing [4] - 28:8,

80:22, 86:24, 87:11, 103:25, 108:25, 111:13, 113:2, 117:22 documentary [1] -89:23 documents [11] -4:17, 6:6, 54:4, 87:9, 103:21, 105:21, 108:17, 109:20, 110:4, 115:23, 118:13 dollars [7] - 18:15, 18:16. 41:9. 62:12. 63:14, 66:11, 116:11 **DONALD** [1] - 2:9 done [10] - 19:4, 34:22, 40:24, 71:16, 73:13, 82:18, 114:3, 120:21, 123:20 double [1] - 70:4 down [18] - 10:25, 17:21, 18:10, 29:19, 38:7, 48:2, 66:23, 68:24, 71:22, 86:7, 86:11, 86:12, 102:10, 105:3, 117:14, 119:9, 124:4, 124:9 downturn [2] - 72:23, 73:3 downward [3] - 13:1, 83:2, 84:14 Dr [48] - 3:11, 4:20, 5:25, 29:17, 30:5, 30:6, 32:5, 32:13, 34:6, 36:16, 37:3, 39:8, 42:12, 43:22, 44:4, 47:6, 50:1, 51:1, 53:14, 54:8, 54:23, 58:6, 60:15, 65:22, 72:19, 73:17, 75:18, 76:14, 78:8, 87:10, 87:18, 88:25, 92:9, 93:20, 94:9, 95:6, 96:6, 98:6, 98:17, 100:13, 101:8, 104:10, 108:3, 116:4, 118:19, 119:12, 122:9, 123:5 draft[3] - 86:25, 87:11, 87:12 drafting [1] - 19:19 drill [1] - 29:19 **DRINKER** [1] - 1:18 drivetrain [1] - 110:18

dropped [1] - 103:15

dropping [1] - 102:10

79:6, 80:19, 80:21,

due [4] - 13:18, 100:6, 106:1, 111:5 duly [1] - 4:9 durable [1] - 28:1 during [15] - 16:11, 21:3, 21:15, 33:18, 50:7, 64:20, 66:16, 73:3, 74:23, 103:23, 111:17, 115:3, 120:8, 122:11 duty [1] - 65:11 dynamics [1] - 31:6

6

# Ε

e-mail [1] - 112:14 earn [4] - 40:20, 41:6, 41:9, 48:9 earned [17] - 9:13, 9:21, 10:13, 10:15, 11:13, 13:22, 15:9, 15:10, 27:2, 30:8, 37:7, 41:3, 64:11, 66:5, 66:20, 69:17, 71:11 earning [2] - 40:20, 66:1 earnings [5] - 27:1, 27:19, 27:20, 28:21, ease [1] - 67:17 easier [1] - 34:7 easiest [1] - 52:22 easily [4] - 24:8, 29:14, 53:3, 61:15 Eaton [55] - 3:24, 5:1, 5:18, 5:25, 6:5, 15:10, 15:11, 16:4, 16:11, 17:25, 20:13, 26:5, 26:7, 26:16, 31:20, 32:6, 35:8, 35:19, 35:24, 36:1, 44:19, 45:10, 45:17, 45:23, 46:12, 46:17, 46:19, 47:20, 48:9, 49:9, 64:7, 66:4, 66:20, 68:1, 89:17, 90:22, 90:25, 92:2, 92:7, 92:11, 93:6, 93:10, 93:14, 95:3, 96:23, 103:7, 103:22, 104:6, 112:25, 120:14, 121:13, 121:24, 122:5, 122:20 **EATON** [1] - 1:8 Eaton's [63] - 5:4, 5:14, 6:11, 6:15,

6:21, 7:11, 7:18, 8:8,

document [12] - 15:6,

67:7, 82:6, 82:7

doctor[1] - 4:2

8:16, 8:24, 9:21, 11:8, 14:20, 14:23, 23:16, 23:20, 24:3, 27:2, 30:9, 30:18, 30:19, 31:17, 31:22, 32:10, 33:8, 37:8, 37:15, 38:2, 44:22, 44:25, 46:8, 46:21, 47:5, 48:5, 48:11, 64:12, 64:18, 65:6, 65:10, 65:22, 66:13, 66:19, 67:20, 68:3, 68:25, 69:2, 80:6, 89:24, 92:5, 92:25, 107:17, 108:5, 108:8, 109:21, 114:13, 115:12, 120:11, 121:4, 121:12, 121:14, 121:20, 122:10 EBIT [1] - 27:19 EBITDA[1] - 28:20 econometric [33] -8:15, 15:16, 19:5, 19:7, 19:8, 19:21, 19:24, 20:17, 20:22, 20:24, 21:7, 23:1, 24:8, 36:11, 60:22, 61:4, 61:7, 80:5, 80:11, 94:20, 94:23, 96:6, 96:11, 96:19, 97:3, 97:7, 97:11, 97:13, 97:18, 97:21, 97:22, 100:9, 106:7 econometrics [2] -8:21, 95:4 economic [15] - 5:1, 5:6, 6:1, 6:7, 6:10, 6:13, 6:24, 7:14, 7:21, 8:3, 10:5, 10:16, 14:18, 19:4, 124:13 economist [4] - 13:9, 20:13, 94:4, 114:15 economist's [2] - 9:1, 92:22 economists [7] - 6:25, 7:4, 8:4, 8:20, 8:22, 11:24, 113:23 effect [19] - 14:18, 31:21, 36:14, 90:16, 90:17, 91:1, 91:13, 91:18, 92:10, 92:14, 94:1, 107:11, 107:24, 108:8, 109:22, 110:2, 118:10, 118:16, 118:20 effective [2] - 37:20, 104:7

effectively [16] - 7:7, 10:24, 10:25, 21:7, 21:16, 21:17, 27:10, 27:22, 38:22, 64:21, 71:13, 80:16, 101:7, 102:11, 104:7, 113:14 effects [2] - 92:24, 107:22 efficients [2] - 115:1, 115:5 effort[1] - 14:24 efforts [1] - 92:2 EG [2] - 64:2 egregious [1] - 31:23 eight [3] - 101:18, 117:1, 117:3 either [3] - 5:12, 97:15, 97:17 elevating [1] - 31:22 elevation [2] - 7:22, 17:3 emphasize [2] - 50:15, 63:24 emphasized [1] -17:25 encompassed [1] -81:11 end [9] - 7:20, 21:17, 31:18, 31:21, 66:16, 99:25, 107:5, 117:10, 118:6 endogenating [1] -120:1 endogeniety [1] -113:24 endorses [1] - 123:24 ends [2] - 54:19, 101:24 engaged [1] - 20:14 enterprise [22] - 9:15, 10:1, 22:21, 25:7, 25:11, 27:4, 27:16, 30:16, 60:17, 70:11, 70:13, 70:14, 70:24, 70:25, 71:3, 71:9, 71:15, 71:23, 72:2, 74:18, 75:15, 76:12 entire [1] - 102:9 entirely [2] - 56:21, 103:12 entry [4] - 6:22, 6:23, 7:2, 116:25 equalization [1] -48:16 equals [1] - 10:2 equitable [2] - 72:10, 76:12 equivalent [4] - 23:7,

23:8, 27:10, 96:23

ESQ [10] - 1:18, 2:3, 2:3, 2:4, 2:4, 2:5, 2:9, 2:13, 2:13, 2:14 ESS [3] - 38:24, 55:19, essentially [1] - 18:18 establishing [1] -22:17 estimate [49] - 5:3, 9:20, 11:18, 11:21, 12:1, 12:8, 14:8, 15:21, 16:22, 19:1, 19:8, 22:1, 22:3, 22:10, 22:17, 23:4, 23:23, 23:25, 28:2, 28:3, 28:23, 29:4, 31:2, 31:3, 31:9, 32:4, 32:8, 32:9, 32:12, 34:1, 34:2, 34:4, 35:15, 50:2, 51:23, 57:21, 60:21, 65:18, 67:25, 72:9, 72:17, 76:1, 76:2, 79:23, 82:25, 83:8, 114:25, 115:5 estimated [2] - 19:10, 32:25 estimates [7] - 11:16, 27:18, 28:7, 69:14, 69:15, 70:10 estimating [6] - 10:5, 13:21, 19:20, 27:10, 68:4, 96:20 estimations [1] -123:15 events [2] - 83:21, 83:22 evidence [4] - 20:12, 89:23, 107:7, 107:10 **EVIDENCE** [1] - 4:8 evident[1] - 83:15 evolution [1] - 58:24 exacerbated [1] - 6:22 exact [5] - 33:23, 55:24, 64:25, 110:23, 112:19 exactly [3] - 30:13, 66:10 EXAMINATION [2] -4:18, 30:3 examination [2] -3:16, 99:3 examine [2] - 3:22, 123:13 examined [4] - 4:10, 89:22, 98:23, 123:6 examining [1] - 91:10 example [9] - 18:16, 38:24, 39:2, 39:21,

except [1] - 108:5 excerpt [7] - 99:9, 99:25, 102:3, 116:23, 117:10, 117:12, 118:6 excluding [1] - 100:18 exclusion [2] - 8:18, 102:10 exclusionary [1] - 6:2 excused [1] - 124:10 exercise [2] - 48:16, 71:14 exhibit [5] - 79:1, 109:4, 110:10, 110:11, 110:14 Exhibit [2] - 101:21, 110:6 existing [1] - 6:22 exists [1] - 56:6 exit[2] - 11:9, 100:6 expect [8] - 31:1, 41:6, 41:9, 57:15, 65:19, 67:8, 67:10, 82:18 expectation [1] -82:23 expectations [2] -50:21, 58:25 expected [14] - 11:19, 14:8, 28:2, 28:10, 33:3, 50:6, 56:3, 73:23, 89:12, 99:12, 99:19, 99:21, 102:21 expecting [2] - 33:5, 85:17 expects [1] - 33:16 expenditure [1] -51:17 expenses [9] - 116:5, 116:10, 116:20, 118:8, 118:10, 118:21, 118:25, 120:5, 120:6 experience [7] - 13:9, 19:18, 22:15, 23:20, 24:3, 82:24, 105:4 experienced [2] -12:20, 109:12 expert [4] - 4:20, 95:23, 98:23, 124:12 experts [2] - 5:15, 76:5 explain [2] - 41:13, 94:13 explained [3] - 17:2, 41:12, 90:10 explaining [4] - 67:18, 90:1, 91:3, 114:17

explanation [2] -

108:19, 122:1

examples [1] - 31:23

107:25, 124:20 explanations [1] -124:6 explanatory [4] -94:23, 95:1, 97:4, 97:13 explicate [1] - 40:8 explicit [8] - 21:1, 31:3, 51:11, 53:3, 53:7, 58:18, 97:20, 103:17 explicitly [1] - 123:23 explored [1] - 88:21 exposition [2] - 67:17, 67:18 expositional [1] -67:22 expressed [1] - 49:5 extensive [5] - 31:16, 35:25, 36:9, 53:10, 103:16 extent [1] - 108:6 extra [1] - 54:4 extreme [1] - 73:11 F

7

F-Platform [1] -107:21 face [1] - 53:9 fact [23] - 8:16, 15:7, 15:10, 18:4, 18:6, 20:16, 21:25, 43:11, 46:16, 57:9, 66:2, 85:19, 93:13, 94:6, 99:1, 99:15, 100:13, 104:19, 110:2, 111:21, 113:25, 116:14, 124:11 faction [1] - 56:22 factor [14] - 19:1, 90:1, 90:4, 90:5, 90:10, 90:12, 91:5, 92:18, 93:21, 93:24, 98:8, 108:7, 108:16 factors [28] - 9:22, 13:2, 13:3, 13:8, 14:18, 36:14, 83:25, 84:11, 84:18, 84:19, 84:20, 91:2, 92:20, 93:22, 94:8, 94:11, 97:17, 102:6, 103:1, 103:2, 103:3, 103:16, 103:19, 104:10, 109:23, 110:4, 119:25 facts [2] - 101:18, 101:19 failure [1] - 89:13

40:22, 41:2, 100:7,

failures [2] - 108:22, 109:10 fair [13] - 30:10, 30:11, 38:2, 38:3, 60:23, 62:2, 70:14, 70:15, 70:17, 71:14, 72:24, 95:24, 101:1 fall [1] - 49:12 far [3] - 5:13, 121:25, 123:10 FASTOW [1] - 2:3 February [16] - 20:9, 20:17, 71:11, 71:19, 72:3, 72:5, 73:2, 73:19, 74:6, 75:10, 75:16, 75:19, 75:24, 76:11, 110:11, 111:7 felt [4] - 11:17, 27:15, 65:18, 80:10 few [3] - 4:3, 30:2, 88:13 field [1] - 41:24 fifth [8] - 8:7, 8:8, 23:10, 23:14, 23:15, 64:6, 65:5, 65:6 figure [38] - 15:19, 16:2, 17:12, 17:15, 17:19, 17:22, 18:7, 25:2, 29:7, 42:11, 42:12, 42:13, 44:22, 47:4, 47:8, 47:23, 48:11, 51:2, 56:19, 59:15, 63:18, 66:9, 66:22, 77:8, 79:9, 82:5, 82:6, 85:2, 85:24, 92:4, 92:5, 100:16, 106:19, 117:1, 117:16, 119:13, 120:23, 123:19 figures [18] - 18:7, 29:16, 51:4, 61:14, 61:22, 63:6, 72:6, 78:9, 79:6, 80:2, 82:7, 82:8, 85:19, 86:17, 119:19, 120:10, 121:1, 123:21 fill [1] - 98:18 final [3] - 86:24, 87:11, 87:13 finance [1] - 12:20 financial [3] - 15:7, 25:21, 73:11 financials [3] - 43:19, 76:8, 85:21 fine [1] - 88:5 first [29] - 3:19, 6:19, 6:21, 9:24, 12:3, 12:5, 13:20, 13:24,

16:17, 19:12, 20:23, 21:5, 21:19, 22:18, 37:10, 38:3, 51:19, 54:13, 55:22, 61:14, 61:20, 61:23, 62:20, 69:20, 70:7, 70:12, 105:5 fiscal [31] - 29:6, 32:17, 33:22, 34:19, 37:24, 39:13, 39:19, 41:18, 49:25, 53:17, 55:5, 55:8, 55:11, 55:17, 55:21, 55:22, 56:5, 56:6, 56:15, 56:18, 57:13, 62:2, 63:3, 68:6, 83:11, 109:12, 117:4, 117:19, 118:3 fit [4] - 20:7, 25:19, 123:8 five [15] - 10:20, 10:21, 11:5, 11:14, 11:19, 22:12, 24:25, 26:17, 29:13, 46:1, 60:11, 60:14, 68:21, 76:8, 80:15 fixed [10] - 21:15, 22:7, 22:9, 22:11, 23:5, 23:19, 105:18, 105:24, 108:13, 116:15 fixing [2] - 17:2, 90:21 fleet [3] - 104:13, 104:14, 111:14 floating [1] - 87:2 flow [1] - 28:8 flows [6] - 27:11, 27:23, 28:10, 28:12, 77:3 fluctuations [1] - 76:9 focus [1] - 29:22 focused [3] - 18:1, 31:14, 101:3 focusing [1] - 9:6 following [1] - 4:4 follows [3] - 99:10, 116:24, 117:13 follows.. [1] - 4:11 Foodliner [2] - 112:24, 113:9 FOR [1] - 1:2 forced [2] - 73:9, 76:18 forecast [14] - 12:6, 21:1, 24:5, 24:6, 49:20, 50:15, 56:3, 57:3, 64:18, 83:20, 87:9, 103:15, 106:4,

118:1

forecasted [8] - 14:5,

35:13, 35:15, 38:4, 38:6, 38:7, 118:3 forecasting [3] -50:18, 50:19, 85:4 forecasts [6] - 13:10, 23:15, 35:1, 38:19, 51:17, 52:12 forever [1] - 41:4 form [1] - 73:16 formal [1] - 115:24 formed [1] - 99:11 formerly [2] - 111:4, 111:8 formula [2] - 10:16, 10:19 forth [2] - 72:14, 78:10 forward [10] - 9:17, 21:18, 50:8, 50:18, 50:21, 72:17, 72:18, 82:25, 100:10, 119:9 forwarded [1] - 110:20 foundation [1] - 3:21 four[11] - 22:18, 29:13, 45:7, 75:11, 77:9, 80:15, 98:2, 117:23, 121:1, 122:11, 122:15 four-and-a-half [4] -45:7, 121:1, 122:11, 122:15 fourth [6] - 7:25, 22:4, 22:7, 28:19, 118:24, frame [1] - 104:1 framework [2] - 3:16, 21:18 frankly [2] - 60:20, 67:24 fraught [1] - 27:13 free [6] - 3:17, 3:22, 18:19, 18:24, 70:3, 123:13 FreedomLine [21] -18:3, 33:5, 33:25, 34:25, 38:21, 38:22, 42:8, 59:24, 63:25, 64:1, 79:16, 83:5, 83:11, 89:20, 114:9, 114:11, 114:22, 115:20, 119:15, 119:21 FreedomLine's [1] -97:14 Freightliner [5] -104:6, 104:7, 111:15, 111:17 front [2] - 34:8, 95:6 full [4] - 34:9, 110:18, 118:1, 118:3 fully [2] - 24:15, 88:21

fun [1] - 109:12 fundamental [3] - 7:2, 123:15, 124:12 fundamentally [1] -30:6 furtherance [1] -121:13 future [6] - 13:11, 27:11, 27:22, 28:11, 41:8, 77:3 G G-Platform [41] - 18:2, 33:25, 38:1, 38:11, 38:17, 38:20, 38:21, 39:13, 42:7, 50:13, 56:22, 59:23, 81:11, 82:5, 84:24, 105:5, 105:9, 105:18, 105:24, 106:1, 106:4, 106:10, 106:19, 107:2, 107:5, 108:12, 108:21, 108:22, 109:9, 109:16, 111:5, 111:11, 113:19, 113:21, 114:8, 114:22, 115:19, 116:10, 116:15, 119:14, 119:20 G-platforms [1] -116:6 gap [2] - 121:19, 121:20 gather [1] - 33:19 general [3] - 31:1, 44:20, 108:10 generally [2] - 30:11, 49:22 generating [2] - 77:4 German [1] - 111:2 Gibbitson's [1] - 28:6 given [10] - 29:4, 39:6,

40:1, 40:24, 41:6,

70:15, 119:18

going-forward [3] -

goodness [1] - 20:6

goods [1] - 28:1

28:23

111:1

90:18

Gordon [2] - 27:8,

graph [1] - 121:23

greater [2] - 50:4,

Gosnell [2] - 110:21,

50:18, 72:17, 72:18

50:23, 50:24, 61:16,

103:15, 121:1, 122:11, 122:15 55:3, 109:2 79:1, 95:19 109:4, 110:14 HANDRIGAN[1] -2:14 happy [2] - 17:19, 109:2 111:12, 111:20 92:25, 93:18 Hayes [1] - 112:11 hear [2] - 36:25, 95:16 heard [1] - 30:6 hearing [2] - 3:10, 98:25 heavy [1] - 65:11 height [1] - 77:9 help [1] - 123:12 helpful [4] - 22:16, 78:22, 98:21, 109:1 high [10] - 11:15, 20:7, 32:6, 39:19, 65:24, 66:4, 66:20, 69:6, 69:12, 70:10 higher [26] - 16:1, 16:5, 20:16, 24:10, 28:25, 39:1, 43:3, 43:23, 43:24, 44:1, 49:20, 49:22, 50:20, 50:22, 50:23, 57:1,

120:23, 121:20, 122:15 Gross [1] - 44:14 grow [1] - 27:23 growth [5] - 27:9, 27:14, 28:2, 28:10, 28:23 guess [3] - 98:24, 123:19, 124:15 guidelines [2] - 76:4, 76:6 Gunning [1] - 1:24 Н HACKETT [1] - 2:4 half [6] - 39:9, 45:7, hand [7] - 4:7, 4:13, 34:6, 36:18, 54:3, handed [3] - 4:17, handing [3] - 54:4. handout [1] - 64:7 hard [4] - 63:9, 82:3, harm [4] - 6:3, 10:10, haul [3] - 32:22, 32:25

8

gross [10] - 44:6, 45:9,

45:13, 45:15, 45:16,

62:11, 63:13,

07/23/2009 12:14:13 PM

58:20, 58:22, 68:1, 69:12, 69:14, 70:5, 70:7, 70:8, 120:6, 121:15 higher-priced [1] -58:22 hitting [1] - 114:22 HOLCOLMB [1] - 2:4 hold [1] - 95:24 Honor [36] - 3:8, 3:10, 3:17, 3:23, 4:3, 4:12, 5:20, 29:17, 29:24, 30:1, 34:9, 36:17, 36:23, 54:2, 54:3, 78:14, 78:24, 87:24, 88:7, 88:12, 88:13, 88:19, 95:12, 96:3, 96:13, 98:14, 98:16, 99:4, 99:5, 109:3, 110:13, 112:13, 120:20, 122:25, 123:5, 123:22 Honor's [1] - 112:4 Honor.") [1] - 124:24 HONORABLE [1] -1:14 hoping [1] - 3:14 horizontal [1] - 90:21 horsepower [1] -50:20 host[2] - 77:23, 120:18 hour[1] - 39:9 hour-and-a-half [1] -39:9 hours [2] - 29:18, 88:4 house [6] - 76:14, 76:18, 76:19, 76:22, 77:2, 77:7 houses [4] - 76:16, 76:23, 76:24, 77:9 housing [2] - 77:14, 77:15 Howrey [1] - 3:24 HOWREY [1] - 2:12 Hyatt [2] - 108:19, 109:8 Hyatt's [1] - 110:7 hypothetical [1] -119:12

# ı

i.e [9] - 9:15, 10:14, 11:1, 12:18, 18:17, 19:17, 20:5, 21:1, 43:17 I.R.S [1] - 76:6 identified [6] - 19:10,

26:4, 26:16, 26:17, 26:20, 115:22 identify [2] - 25:18, 59:19 ignored [2] - 16:15, illuminate [1] - 124:8 image [1] - 103:5 impact [6] - 8:17, 31:17, 94:3, 94:5, 104:9, 120:17 impacts [1] - 8:8 implement [1] - 93:15 implementation [1] -91:12 implementing [1] -22:23 implicitly [1] - 35:11 implied [7] - 18:6, 27:22, 28:10, 35:14, 39:15, 58:13, 79:23 implies [1] - 48:4 important [3] - 31:6, 34:24, 38:16 imported [1] - 15:6 impractical [1] - 114:5 IN [2] - 1:1, 1:2 inability [1] - 7:11 inappropriate [2] -75:17, 75:18 incentive [1] - 46:25 incentives [6] - 41:24, 44:16, 46:12, 46:20, 47:5, 111:19 Incentives [1] - 44:14 incentivize [1] - 46:13 include [7] - 6:13, 38:23, 39:5, 40:22, 49:15, 49:18, 95:5 included [15] - 17:14, 17:15, 17:18, 40:21, 51:17, 53:16, 56:17, 57:15, 57:22, 61:22, 81:13, 97:21, 97:24, 97:25, 98:2 includes [4] - 17:18, 23:19, 49:14, 49:16 including [5] - 44:9, 53:24, 89:13, 98:2, 103:2 incorrect [2] - 17:8, 95:4 increase [9] - 85:18, 85:22, 93:13, 93:16, 102:21, 103:7, 104:7, 116:5, 122:5 increased [5] - 7:10, 50:19, 107:25,

114:19, 118:9

increases [2] - 93:8,

118:20 increasing [3] - 85:25, 86:4, 118:10 incremental [24] -10:12, 11:1, 37:6, 42:4, 42:5, 59:21, 59:22, 59:25, 60:1, 61:3, 62:8, 62:11, 63:3, 63:6, 63:13, 63:18, 63:20, 66:22, 69:16, 69:17, 106:17, 107:4, 120:7 incurred [9] - 21:14, 21:24, 64:20, 66:12, 66:14, 66:16, 116:9, 116:21, 120:8 indeed [6] - 9:2, 29:2, 90:1, 90:5, 97:12, 98:8 independent [13] -15:19, 19:10, 24:17, 24:19, 24:22, 31:9, 32:1, 32:4, 35:15, 35:18, 60:14, 79:11, 79:15 independently [1] -26:19 index [4] - 27:25, 115:8, 115:9, 115:16 indicate [3] - 117:5, 117:7, 117:22 indicated [1] - 3:11 indicates [3] - 117:21, 117:24, 118:1 indicating [1] - 100:24 indicator [1] - 115:25 individual [7] - 51:8, 57:4, 73:15, 92:14, 93:6, 93:7, 114:4 individually [1] -91:16 individuals [3] -12:20, 13:14, 53:5 induces [2] - 93:10, 104:7 indulge [1] - 98:14 indulgence [2] -112:4, 123:1 industries [1] - 28:7 industry [8] - 26:8, 26:21, 28:1, 72:20, 72:23, 78:1, 84:12, 107:12 infeasible [1] - 97:12 infer[1] - 66:3 inference [1] - 115:12 inflated [1] - 29:4

36:2, 36:10, 51:5, 51:11, 52:24, 53:1, 53:19, 57:19, 73:14, 74:11, 74:17, 80:9, 80:10, 80:17, 81:14, 81:21, 85:16, 86:6, 99:2, 104:3 inherent [1] - 11:12 initial [4] - 28:13, 41:4, 99:21 innovation [1] - 8:9 innovations [1] - 8:10 input [5] - 23:1, 36:4, 36:7, 66:24, 79:21 inputs [5] - 21:8, 22:23, 22:24, 78:12, 84:2 instance [1] - 3:19 instances [1] - 93:9 instead [2] - 40:9, 68:2 interest [15] - 15:4, 15:22, 16:19, 17:2, 17:4, 17:6, 18:24, 25:23, 27:19, 27:20, 28:21, 31:14, 58:14, 98:3 internal [2] - 13:10, 23:1 interpret [2] - 44:20, 49:6 interrupt [2] - 3:17, 5:21 introduced [2] -105:6, 107:21 introducing [1] - 8:10 introduction [4] -56:4, 56:9, 107:13, 114:14 introductions [2] -51:13, 55:15 introductory [4] -89:8, 89:10, 92:17, 98:7 investment [3] -12:23, 86:20, 87:14 investments [1] -26:16 invite [1] - 123:11 invoice [3] - 16:1. 44:11, 122:14 involved [2] - 26:7, 26:8 involving [1] - 10:10 irrelevant[1] - 16:18 isolate [1] - 108:8 issue [14] - 12:18, 16:18, 26:7, 28:1,

31:24, 33:13, 33:18,

72:11, 101:3,

115:10, 120:15, 121:7, 121:8, 124:21 issues [26] - 19:22, 77:23, 94:11, 100:10, 107:11, 107:14, 107:17, 107:24, 111:6, 111:11, 114:12, 114:16, 114:17, 115:1, 115:11, 115:22, 116:1, 116:13, 118:18, 119:5, 120:18, 122:2, 122:7, 122:8 item [1] - 50:9 items [1] - 39:6 iterations [1] - 80:4 itself [2] - 26:17, 50:9

9

# J

J.V [1] - 111:5 January [5] - 104:24, 112:13, 113:1, 113:9, 113:13 JAY [1] - 2:3 JENNIFER [1] - 2:4 Joe [1] - 3:23 joint[12] - 21:16, 26:10, 71:1, 98:11, 98:12, 99:7, 99:12, 102:13, 110:21, 112:18, 113:13, 113:15 JOSEPH [1] - 2:13 July [4] - 1:12, 20:18, 100:9, 102:2 June [3] - 103:25, 117:16, 117:20 junk [2] - 123:9, 124:3 jury [4] - 29:12, 123:9, 124:8

# K

KAREN [1] - 1:18 keep [2] - 40:14, 108:4 kind [5] - 3:21, 52:19, 57:18, 72:11, 123:20 kinds [1] - 39:3 Kline [2] - 112:15, 112:17 Kline's [1] - 112:20 Knight [3] - 110:12, 110:17, 111:24 knowledgeable [1] -13:14

information [26] -

4:24, 11:25, 12:15,

13:13, 19:14, 23:9,

# L

label [1] - 37:16 labeled [1] - 38:18 lacked [1] - 73:20 lag [1] - 97:24 large [3] - 56:22, 111:4, 111:8 larger [1] - 4:14 largest [1] - 13:4 last [3] - 3:10, 54:19, 72.22 laurels [1] - 124:17 law [1] - 124:1 lay [1] - 3:21 lays [1] - 74:13 **LAZEROW** [1] - 2:13 leadership [1] - 12:21 least [4] - 6:16, 86:5, 88:17, 91:4 led [1] - 113:15 left [2] - 55:3, 88:13 left-hand [1] - 55:3 length [1] - 16:13 Lepages [1] - 123:23 less [7] - 46:3, 64:14, 65:1, 65:3, 69:8, 89:12, 124:22 less-than-expected [1] - 89:12 letting [1] - 40:7 level [9] - 34:23, 56:25, 58:20, 69:1, 69:13, 70:5, 94:5, 110:25, 112:1 leveling [1] - 44:6 levels [9] - 34:22, 38:23, 38:25, 41:19, 49:18, 50:4, 56:24, 57:25, 58:2 levied [1] - 24:12 liability [6] - 11:6, 19:16, 20:11, 92:23, 109:25, 122:7 light [2] - 13:7, 83:21 likely [1] - 13:15 line [59] - 17:12, 17:23, 18:1, 18:2, 32:22, 32:25, 37:11, 38:8, 38:9, 40:1, 41:7, 41:17, 42:7, 42:16, 43:2, 44:22, 47:9, 48:22, 49:4, 50:9, 56:18, 57:5, 58:10, 59:14, 59:16, 62:11, 62:15, 62:18, 62:20, 62:24, 63:10, 63:11, 63:12, 63:13, 63:16, 63:19, 63:22,

64:4, 64:21, 65:10, 65:14, 65:22, 66:15, 66:23, 67:13, 68:8, 79:8, 82:4, 96:9, 100:17, 102:24, 106:10, 106:15, 121:24 Linehaul [17] - 42:17, 65:15, 65:23, 66:4, 66:8, 66:20, 67:5, 67:7, 67:11, 67:14, 67:22, 67:25, 68:1, 68:8, 68:14, 69:6 Linehauls [1] - 65:15 lines [3] - 36:24, 69:20, 121:23 link [1] - 93:17 liquidity [1] - 77:22 listed [3] - 37:18, 59:15, 94:15 lists [1] - 103:3 LL [1] - 33:9 LLC[1] - 1:4 LLP [3] - 1:18, 2:2, 2:12 load [1] - 34:15 long-term [2] -107:22, 109:11 look [31] - 11:24, 33:12, 36:21, 37:11, 47:4, 60:25, 70:12, 71:21, 73:3, 74:5, 75:8, 76:15, 76:23, 77:8, 80:8, 87:22, 89:5, 91:13, 92:9, 94:4, 94:8, 98:13, 100:16, 101:4, 106:5, 106:6, 108:19, 110:6, 110:7, 111:18, 123:17 looked [25] - 20:6. 23:16, 25:15, 35:25, 52:24, 52:25, 58:17, 68:24, 72:6, 74:1, 74:8, 74:10, 89:11, 91:16, 94:10, 94:11, 94:12, 94:15, 102:24, 106:9, 107:11, 107:23, 115:1, 119:5, 120:23 looking [17] - 33:19, 34:13, 54:16, 55:12, 59:4, 69:20, 71:9, 72:1, 72:5, 73:2, 74:25, 75:3, 78:1, 91:10, 113:25, 118:13, 118:14

loosely [1] - 92:23

losing [1] - 84:19

loss [4] - 25:11, 101:13, 101:14, 121:7 losses [5] - 64:19, 65:1, 66:12, 66:16, 111:21 lost [62] - 9:13, 9:15, 10:1, 10:8, 10:11, 10:12, 10:17, 10:22, 10:23, 11:1, 11:4, 13:20, 14:2, 15:14, 17:5, 18:18, 22:21, 23:25, 25:1, 25:2, 25:7, 25:11, 27:4, 27:16, 36:4, 37:4, 60:10, 60:17, 62:8, 64:6, 68:21, 68:25, 69:21, 72:2, 72:16, 75:15, 88:22, 89:7, 104:14, 106:1, 108:14, 109:16, 111:8, 111:24, 112:2, 113:9, 119:13, 119:14, 119:19, 119:20, 119:23, 120:11, 121:4, 121:19, 122:19 loud [1] - 36:25 low [7] - 11:15, 34:15, 41:18, 70:10, 73:10, 77:21 lower [20] - 15:10, 18:6, 21:25, 22:17, 23:18, 28:19, 30:24, 45:3, 65:18, 65:21, 67:24, 75:11, 89:12, 120:11, 121:1, 121:5, 122:1, 122:11, 122:15, 122:21 lower-than-expected [1] - 89:12 lowered [2] - 21:25, 22:3 loyal [2] - 111:4, 111:8 LTA[2] - 91:23, 104:6 LTAs [22] - 89:24. 89:25, 90:4, 90:6,

# М

90:9, 90:11, 90:12,

90:15, 91:1, 91:12,

93:21, 98:8, 100:3,

92:1, 92:3, 92:18,

100:6, 102:8,

103:23, 110:2,

121:13

Mac [1] - 90:21

macroeconomic [1] -94:11 magically [1] - 73:8 magnitude [1] - 69:8 mail [1] - 112:14 major [2] - 76:10, 91:7 management [2] -83:18, 103:18 manipulated [1] -123:21 manner [1] - 15:11 manual [23] - 32:7, 32:10, 34:15, 34:25, 38:1, 44:23, 48:6, 48:12, 49:10, 55:1, 56:20, 57:16, 79:7, 79:12, 84:24, 99:12, 120:12, 120:25, 121:4, 121:21, 122:10, 122:15, 122:21 manuals [2] - 43:4, 46:9 manufacturers [1] -47:25 manufacturing [1] -28:1 March [1] - 102:5 margin [2] - 13:25, 65:24 marginal [2] - 21:19, 21:21 market [107] - 5:7, 5:14, 5:16, 5:19, 7:13, 8:11, 8:18, 9:23, 11:8, 11:9, 11:10, 13:2, 13:5, 13:11, 13:22, 14:5, 14:8, 14:14, 15:17, 19:9, 19:14, 19:17, 20:15, 23:2, 23:23, 23:24, 24:6, 24:9, 31:6, 32:22, 36:13, 38:13, 39:2, 60:23, 61:5, 61:8, 65:23, 66:4, 66:21, 67:5, 67:11, 67:12, 67:15, 68:9, 70:14, 71:14, 73:11, 74:22, 75:10, 76:9, 76:10, 76:14, 76:20, 76:22, 77:10, 77:14, 77:15, 77:20, 77:22, 79:22, 79:24, 79:25, 80:12, 83:8, 83:21, 84:9, 84:20, 88:23, 89:7, 89:12,

89:14, 90:10, 90:17,

90:18, 91:3, 91:11,

91:14, 92:6, 92:20,

93:3, 94:7, 94:14,

97:15, 97:24, 100:5, 100:6, 100:7, 100:14, 100:17, 100:21, 102:10, 102:11, 102:14, 102:20, 104:9, 105:6, 106:3, 106:23, 108:1, 109:24, 114:17, 114:19, 115:3, 115:21, 119:14 Marketing [1] - 112:18 markets [4] - 5:2, 32:23, 82:22 Martello [6] - 12:21, 81:1, 98:11, 102:13, 102:19, 103:22 material [2] - 93:2, 98:24 materiality [1] - 93:1 math [5] - 43:2, 46:5, 46:11, 48:4, 48:18 matter [6] - 16:10, 43:2, 43:6, 43:7, 95:4, 114:9 McCoy [2] - 112:15, 112:23 mean [5] - 40:3, 78:21, 90:4, 107:9, 115:5 means [8] - 33:1, 49:6, 56:9, 89:24, 90:9, 92:19, 93:21, 116:17 measure [29] - 10:22, 11:3, 13:23, 13:25, 14:1, 21:4, 23:18, 23:22, 25:21, 25:22, 60:22, 61:4, 61:7, 61:20, 61:23, 61:24, 73:1, 80:12, 91:13, 91:17, 98:3, 98:4, 115:8, 115:24, 116:2, 118:12, 121:11 measured [9] - 15:11, 16:21, 61:12, 65:17, 72:2, 73:23, 75:16, 75:19, 75:24 measures [3] - 61:16, 70:25, 71:4 measuring [4] - 11:4, 73:19, 115:11, 115:12 median [1] - 70:9 meet[1] - 93:15 meeting [3] - 83:16, 85:25, 101:11 meetings [1] - 83:17 MELISSA [1] - 2:14 memory [1] - 62:17

mentioned [8] - 16:17,

20:3, 20:5, 20:7,

20:9, 20:17, 20:22,

11

23:5, 27:9, 31:2, 55:18, 61:15, 86:7, 104:5 merely [1] - 6:5 Meritor [78] - 3:9, 5:4, 7:10, 9:13, 9:16, 9:21, 10:13, 11:9, 11:13, 12:6, 12:21, 13:22, 14:5, 17:4, 21:14, 21:16, 26:10, 27:2, 28:19, 28:20, 29:6, 32:13, 32:16, 32:18, 33:3, 33:16, 35:3, 35:20, 37:14, 40:2, 40:20, 42:22, 44:19, 46:12, 46:19, 50:3, 57:15, 64:20, 65:19, 66:7, 66:12, 66:14, 66:18, 67:4, 67:10, 69:17, 69:18, 71:1, 71:4, 71:18, 72:7, 73:4, 73:8, 83:18, 86:8, 86:9, 86:19, 87:5, 89:16, 92:11, 95:2, 96:20, 96:22, 98:10, 100:14, 101:10, 107:19, 110:18, 114:19, 119:6, 121:17, 121:24, 122:2, 122:3 MERITOR [2] - 1:4 Meritor's [32] - 8:17, 14:19, 19:9, 19:18, 21:2, 22:10, 23:22, 25:24, 27:18, 31:22, 32:24, 38:6, 42:16, 45:3, 48:17, 48:23, 67:14, 67:21, 68:4, 68:8, 68:25, 72:17, 78:5, 79:23, 88:22, 91:14, 97:24, 100:17, 104:8, 115:11, 121:21, Method [12] - 19:5, 42:2, 59:17, 60:2, 60:6, 61:4, 62:13, 62:15, 63:2, 70:5, 70:8, 70:9 method [55] - 10:5, 12:3, 12:4, 12:5, 12:7, 12:11, 13:20, 13:24, 15:15, 19:5, 20:23, 21:6, 21:7, 21:19, 22:4, 22:6, 22:7, 22:18, 22:19, 22:20, 22:21, 22:23, 23:10, 23:14, 23:15, 24:1, 24:17, 25:25,

27:17, 28:19, 30:15, 36:11, 37:3, 42:5, 60:16, 60:18, 60:22, 60:25, 61:14, 61:18, 62:1, 62:8, 62:20, 65:5, 65:6, 66:7, 69:5, 70:9, 89:19, 118:24, 119:22, 120:7 methodologies [1] -29:11 methodology [9] -8:21, 10:3, 11:20, 19:15, 30:7, 35:5, 66:15, 71:24, 108:4 Methods [1] - 69:11 methods [8] - 10:21, 16:22, 23:3, 24:16, 24:25, 30:13, 80:15, 80:18 metrics [1] - 24:5 mid [1] - 90:13 mid-2002 [9] - 102:15, 102:17, 102:18, 105:15, 105:17, 105:24, 108:13, 108:14, 109:16 mid-nineties [1] -90:13 middle [2] - 86:11, 112:14 might [5] - 4:4, 76:7, 77:1, 77:6, 89:6 Mike [1] - 112:14 million [14] - 28:25. 64:24, 65:1, 65:3, 69:9, 69:21, 116:11, 117:1, 117:3, 117:16, 117:20, 117:23, 118:3 mind [5] - 40:14, 87:24, 96:13, 96:14, 113:2 minimum [1] - 93:23 minus [1] - 42:5 minute [6] - 31:12, 47:7, 47:11, 51:2, 81:22, 88:4 minutes [6] - 85:25, 88:6, 88:13, 88:17, 101:11, 112:8 mischaracterized [1] -16:15 misleading [1] - 44:2 Mix [1] - 86:10 mix [4] - 17:22, 49:16, 50:17, 50:18 mixing [1] - 77:18 model [30] - 19:7, 19:8, 19:21, 19:24,

20:24, 21:8, 23:1, 24:8, 27:9, 28:23, 67:1, 80:5, 80:11, 87:19, 96:20, 96:25, 97:3, 97:7, 97:11, 97:13, 97:18, 97:21, 97:22 models [2] - 27:6, 56:10 modest [1] - 27:24 modified [1] - 53:12 moment [3] - 52:7, 91:21, 106:13 money [1] - 18:15 monopolistically [4] -65:24, 66:20, 69:6, 69:12 monopolization [1] -5:10 monopoly [5] - 5:18, 66:1, 66:3, 69:1, 70:5 months [1] - 72:22 MORRIS [1] - 2:9 most [8] - 10:9, 11:20, 27:16, 27:17, 31:23, 74:10, 74:16, 80:10 mount[2] - 108:23, 109:10 MR [71] - 3:8, 3:14, 3:23, 4:3, 4:12, 4:14, 4:19, 5:20, 5:24, 29:17, 29:24, 30:1, 30:4, 34:9, 34:12, 36:17, 36:20, 36:23, 37:2, 41:16, 47:18, 54:2, 54:7, 78:14, 78:18, 78:20, 78:24, 79:4, 79:5, 82:1, 87:24, 88:5, 88:7, 88:12, 88:19, 88:24, 89:2, 89:4, 95:12, 95:16, 96:3, 96:5, 96:12, 96:15, 96:18, 98:14, 98:16, 99:4, 99:5, 100:1, 101:22, 101:25, 106:18, 109:3, 109:7, 110:13, 110:16, 112:4, 112:9, 112:11, 112:16, 113:8, 116:22, 117:11, 118:7, 120:20, 120:22, 122:25, 123:3, 123:5, 123:22 multi [2] - 104:13, 104:14

multi-year [2] 104:13, 104:14
multiple [6] - 16:22,
25:23, 27:16, 28:25,
29:2, 87:8
multiples [7] - 25:13,
25:16, 25:17, 26:13,
26:24, 27:1, 72:14
multiplied [6] - 10:14,
21:3, 61:12, 61:13,
65:14, 66:21
multiply [3] - 38:9,
59:17, 59:21
multiplying [3] 10:22, 11:1, 14:15

# N

name [1] - 25:12 namely [3] - 18:2. 26:5, 26:15 narrow [1] - 26:25 narrowly [1] - 68:13 necessarily [7] -37:21, 64:19, 68:13, 69:18, 73:7, 121:6, 121:16 necessary [1] - 97:12 need [18] - 31:4, 31:6, 34:21, 48:20, 58:15, 76:8, 76:9, 83:20, 85:7, 94:1, 95:15, 96:1, 103:18, 106:5, 106:6, 110:4, 112:8, 124:18 negligible [1] - 119:9 negotiated [1] - 104:2 negotiations [2] -93:5, 103:24 neighborhood [1] -76:23 neighbors [1] - 76:15 neighbors' [1] - 77:8 net [25] - 17:16, 37:18, 39:5, 41:21, 41:23, 42:10, 44:6, 44:8, 44:20, 45:22, 45:25, 46:1, 48:5, 48:8, 48:11, 48:22, 49:8, 49:9, 56:19, 59:7, 59:11, 81:10, 82:7, 82:8 never[1] - 63:25 nevertheless [1] -22:16 New [2] - 54:21, 56:1

new [2] - 56:4, 107:13

news [1] - 111:3

next [10] - 15:15,

18:13, 55:9, 62:6. 68:20, 104:15, 108:20, 116:25, 117:6, 117:11 NICHOLS [1] - 2:9 nine [1] - 72:22 nines [2] - 48:1, 57:13 nineties [1] - 90:13 NO [1] - 1:9 nominal [4] - 18:15, 18:19, 18:22, 29:10 non [1] - 7:24 normalcy [1] - 76:21 note [2] - 51:15, 101:16 nothing [3] - 106:8, 107:3, 107:8 noticed [1] - 98:20 notion [2] - 98:18, 124:2 November [7] - 12:18. 14:3, 51:10, 78:11, 103:13, 106:20 number [50] - 11:1, 14:12, 14:13, 14:16, 16:25, 17:16, 20:25, 25:4, 33:17, 33:19, 33:23, 33:24, 34:13, 34:18, 35:3, 35:14, 37:19, 38:4, 38:5, 38:6, 38:9, 38:10, 38:12, 38:14, 39:5, 40:2, 43:18, 57:22, 59:6, 59:12, 64:25, 65:22, 66:15, 67:7, 79:9, 79:24, 81:18, 82:16, 84:18, 84:25, 85:13, 85:14, 85:22, 103:1, 106:10, 111:14 numbers [26] - 18:19, 18:22, 32:21, 33:13, 43:21, 43:23, 43:24, 44:1, 44:3, 53:9, 53:11, 56:16, 60:5, 64:2, 68:18, 82:3, 82:14, 83:23, 84:4, 84:7, 84:23, 85:20, 86:3, 87:6, 87:16 numerous [1] - 87:2

# 0

o'clock [1] - 1:12 object [1] - 5:21 objection [1] - 98:16 observe [1] - 93:19 obtained [7] - 26:24, 37:14, 39:12, 40:1,

43:4, 67:4, 96:20 obviously [2] - 26:7, 75:10 occur[1] - 56:10 occurred [3] - 20:14, 30:17, 100:24 occurring [7] - 13:2, 91:8, 92:6, 100:11, 111:12, 116:1, 118:18 October [10] - 53:21, 53:24, 54:13, 55:8, 55:12, 56:12, 83:16, 85:6, 102:5, 103:25 OEM [11] - 8:1, 16:1, 42:18, 43:10, 43:19, 44:25, 46:3, 90:25, 93:14, 93:15, 122:13 OEM's [1] - 93:11 **OEMs** [17] - 31:5, 31:18, 41:24, 44:7, 44:12, 45:22, 85:23, 89:24, 90:7, 91:7, 93:5, 93:6, 93:10, 121:13, 121:15, 121:20, 122:5 OF [1] - 1:2 offered [2] - 21:18, 121:16 Official [1] - 1:24 often [3] - 11:25, 27:8, 30:12 once [2] - 18:12, 41:13 one [83] - 9:12, 13:4, 13:7, 17:11, 17:12, 17:23, 18:1, 18:19, 18:20, 18:22, 19:2, 21:8, 25:1, 26:9, 28:18, 30:16, 31:11, 31:23, 33:12, 33:24, 36:10, 37:3, 38:15, 38:19, 38:20, 40:14, 42:5, 43:10, 46:23, 47:7, 47:11, 50:9, 50:16, 55:8, 55:22, 60:16, 62:11, 63:1, 63:19, 64:7, 65:10, 67:17, 68:24, 69:2, 71:6, 71:17, 78:19, 78:20, 78:21, 81:20, 81:22, 86:4, 87:3, 87:12, 87:13, 90:20, 91:21, 91:24, 93:1, 95:15, 95:17, 96:15, 98:10, 99:11, 99:24, 100:3, 101:12, 101:13, 102:4, 104:13, 104:19, 106:13, 110:1, 111:23, 114:15,

115:7, 115:15, 119:22, 120:4, 121:6 ones [2] - 43:11, 53:4 ongoing [2] - 106:1, 107:2 operating [11] - 23:18, 23:24, 27:19, 64:8, 64:12, 65:6, 69:1, 78:5, 118:25, 120:7 operations [1] - 22:16 opinion [3] - 9:6, 27:13, 94:3 opposed [4] - 20:18, 22:11, 64:18, 68:1 optimistic [1] - 89:19 oranges [2] - 17:9, 49:13 order [3] - 4:25, 67:24, 93:25 orders [2] - 69:8, 112:25 organization [1] -103:6 orient[1] - 113:5 OSTOYICH [59] - 2:13, 3:23, 5:20, 30:1, 30:4, 34:9, 34:12, 36:17, 36:20, 36:23, 37:2, 41:16, 47:18, 54:2, 54:7, 78:14, 78:18, 78:20, 78:24, 79:4, 79:5, 82:1, 87:24, 88:5, 88:7, 88:12, 88:19, 88:24, 89:2, 89:4, 95:12, 95:16, 96:3, 96:5, 96:12, 96:15, 96:18, 98:14, 99:5, 100:1, 101:22, 101:25, 106:18, 109:3, 109:7, 110:13, 110:16, 112:4, 112:9, 112:11, 112:16, 113:8, 116:22, 117:11, 118:7, 120:20, 120:22, 122:25, 123:3 Ostoyich [3] - 3:24, 79:1, 95:19 overall [9] - 13:5, 19:3, 30:15, 32:21, 82:21, 82:22, 94:12, 100:7, 106:23 overarching [4] - 10:3, 22:22, 60:18, 61:23 overdrive [2] - 108:22, 109:9 overly[1] - 89:19

own [5] - 4:25, 76:5,

107:17, 109:21, 122:9 owners [2] - 26:10, 83:19

# Ρ

P&L [2] - 17:16, 69:18 p.m [3] - 1:12, 3:4, 125:2 Paccar [4] - 91:18, 92:2, 92:8, 92:9 Paccar's [1] - 92:11 page [13] - 9:24, 54:13, 54:19, 60:9, 60:10, 62:6, 68:20, 96:8, 101:23, 105:4, 108:20, 109:8, 112:14 Page [31] - 36:22, 42:11, 42:12, 47:4, 48:11, 48:25, 60:25, 62:4, 63:9, 65:4, 71:22, 81:17, 81:18, 81:24, 81:25, 82:2, 83:1, 83:15, 86:7, 86:8, 87:22, 88:25, 91:24, 96:9, 96:16, 98:13, 100:16, 104:22, 104:23, 112:13, 116:19 Pages [1] - 60:10 pages [5] - 91:9, 92:4, 124:19, 124:20, 124:22 paid [7] - 7:20, 8:1, 35:25, 72:1, 116:25, 117:3, 121:15 paper[1] - 110:6 Paragraph [10] -71:21, 71:22, 87:22, 88:25, 92:17, 94:18, 97:19, 104:22, 105:3, 105:17 paragraph [6] - 89:8, 89:10, 92:18, 97:4, 98:7, 105:1 parameter [7] - 15:3, 15:22, 16:18, 17:4, 31:14, 58:14, 58:15 parent [2] - 26:7, 26:9 part [23] - 7:3, 8:15, 17:13, 32:3, 37:3, 42:8, 43:14, 51:18, 53:20, 56:13, 62:20, 63:22, 64:4, 70:18, 70:21, 74:19, 75:4, 95:22, 115:19, 116:2, 120:15,

particular [42] - 8:9, 12:10, 12:11, 12:16, 12:24, 13:7, 16:12, 17:12, 18:1, 20:19, 24:1, 24:13, 25:12, 26:4, 26:21, 31:19, 35:20, 41:7, 41:10, 42:7, 44:18, 50:18, 50:24, 52:25, 57:3, 57:7, 59:22, 73:9, 73:13, 76:19, 80:21, 80:22, 84:7, 84:11, 84:25, 85:12, 91:13, 91:14, 91:18, 120:2, 122:19 particularly [8] -13:15, 15:3, 36:3, 53:12, 55:24, 56:2, 107:12, 108:2 partnership [1] -90:25 past [1] - 82:23 patience [1] - 59:10 pattern [2] - 114:18, 119:8 PAUL[1] - 2:3 Paul [1] - 3:8 Pause [7] - 47:13, 78:23, 81:23, 88:2, 91:22, 106:14, 113:6 pay [11] - 70:14, 71:10, 72:6, 73:1, 73:20, 74:1, 74:5, 74:8, 74:18, 77:13, 77:15 paying [2] - 76:24, 122:4 payments [2] - 44:9, 48.17 peak [3] - 116:8, 118:15, 118:17 pegged [1] - 100:24 pegging [1] - 101:6 penetration [3] -89:20, 90:18, 102:20 people [1] - 76:24 per [37] - 10:23, 12:9, 15:4, 15:5, 15:6, 15:8, 15:11, 15:24, 16:20, 21:4, 23:6, 23:11, 24:4, 31:14, 31:15, 36:5, 37:20, 39:15, 39:21, 42:3, 43:17, 47:9, 47:21, 47:25, 48:19, 58:13, 61:24, 81:10, 85:23, 116:7, 116:13, 118:14, 118:17 per-unit [23] - 12:9,

15:8, 15:11, 15:24, 21:4, 23:6, 23:11, 24:4, 31:14, 31:15, 36:5, 39:15, 39:21, 61:24, 85:23, 116:7, 116:13, 118:14 percent [17] - 28:3, 28:5, 45:7, 45:23, 46:2, 67:5, 67:11, 68:9, 68:10, 102:21, 121:1, 121:5, 122:11, 122:15, 122:21 percentage [3] -16:24, 34:2, 67:12 percentages [2] -67:25, 68:11 perceptions [1] -84:12 perform [1] - 82:24 performance [22] -32:14, 32:16, 32:23, 33:3, 33:6, 33:7, 33:9, 33:17, 33:20, 34:15, 49:21, 57:6, 58:21, 65:19, 67:12, 67:22, 68:2, 68:3, 90:2, 111:5, 111:11, 115:21 performed [6] - 6:16, 6:24, 20:4, 20:8, 35:16, 36:11 performing [1] - 8:23 perhaps [1] - 7:23 period [59] - 14:6, 14:7, 14:17, 19:19, 20:9, 20:14, 20:25, 21:1, 21:3, 21:15, 22:8, 23:21, 27:21, 28:8, 29:15, 33:18, 43:12, 46:17, 49:20, 50:8, 53:24, 55:20, 64:20, 66:12, 69:5, 69:22, 72:8, 72:12, 72:14, 72:16, 74:11, 74:14, 74:17, 74:23, 74:25, 76:4, 76:16, 78:5, 78:7, 83:17, 84:10, 90:8, 90:24, 91:1, 98:1, 100:9, 100:12, 101:2, 102:9, 103:23, 106:5, 108:2, 111:17, 115:3, 116:1, 116:8, 120:9, 122:11 periods [1] - 55:25 person [5] - 81:6,

121:18, 122:18

82:10, 82:14, 83:10,

86:16

15:4, 15:5, 15:6,

normalis 95.0
personal [1] - 85:8
perspective [3] - 5:1,
9:1, 116:12
perspectives [1] - 13:14
Phoenix [1] - 110:17
physical [2] - 36:18, 115:24
pick[1] - 77:8
picked [2] - 29:3,
85:12
picking [2] - 84:6,
98:19
piece [2] - 85:16,
116:16
pieces [1] - 98:19
place [3] - 18:9,
103:20, 113:23
Plaintiff [1] - 3:9
plaintiff [4] - 9:7, 9:12,
112:10
PLAINTIFF'S [1] -
125:11
Plaintiffs [2] - 1:6, 2:7
plaintiffs [4] - 9:3,
10:2, 30:8, 64:11
PLAINTIFFS' [1] - 4:8
plan [66] - 12:6, 12:8,
12:10, 12:17, 12:24,
13:7, 13:19, 13:21,
13:7, 13:19, 13:21, 14:4, 14:10, 15:2,
15:13, 15:20, 16:1,
19:14, 22:25, 23:4,
23:7, 23:12, 24:2,
24:6, 24:20, 24:23,
35:12, 36:10, 36:12,
37:18, 38:5, 38:14,
38:17, 39:16, 40:2,
40:25, 50:8, 51:6,
51:10, 51:18, 52:1,
52:3, 52:6, 52:7,
52:8, 52:9, 52:14,
52:17, 52:25, 53:3,
53:11, 53:14, 53:16,
57:8, 78:8, 78:11,
78:13, 82:10, 82:15,
83:6, 83:10, 84:22,
86:12, 103:14,
106:21, 123:16,
123:24, 124:13
planned [2] - 117:7,
117:23
plans [9] - 12:14, 13:1,
51:7, 51:11, 53:6,
57:25, 58:17, 84:17,
85:11
platform [1] - 59:22
Platform [44] - 18:2,
33:25, 38:1, 38:11,
38:17, 38:20, 38:21,

```
39:13, 42:7, 50:13,
  56:22, 59:23, 64:2,
  81:11, 82:5, 84:24,
  105:5, 105:9,
  105:18, 105:24,
  106:1, 106:4,
  106:10, 106:19,
  107:2, 107:5,
  107:21, 108:12,
  108:21, 108:22,
  109:9, 109:16,
  111:5, 111:11,
  113:19, 113:21,
  114:8, 114:22,
  115:19, 116:10,
  116:15, 119:14,
  119:20
 platforms [1] - 116:6
play [4] - 98:9, 99:6,
  99:8, 116:22
played [3] - 99:9.
  116:23, 117:12
plots [1] - 100:13
plotted [3] - 47:5,
  47:19, 121:2
plus [3] - 10:1, 60:17,
  110:18
point [13] - 3:7, 20:17,
  29:12, 36:24, 51:1,
  70:15, 73:11, 75:3,
  88:21, 96:8, 105:1,
  109:25, 112:6
pointed [3] - 17:23,
 37:23, 85:19
pointing [2] - 70:3,
 110:1
points [5] - 34:3, 43:8,
 43:21, 73:10, 85:8
poor [2] - 103:5,
 104:19
popped [1] - 38:7
portion [3] - 18:4,
 25:1, 67:5
posit [3] - 33:21,
 48:23, 67:14
position [1] - 35:2
possibility [2] - 21:14,
 21:23
possible [1] ~ 108:6
possibly [1] - 6:17
postulated [1] - 25:5
potential [4] - 33:8,
 44:2, 89:11, 94:13
power[2] - 5:18, 66:3
pre [6] - 13:24, 16:19,
 44:8, 56:9, 56:16,
 80:15
pre-profit[1] - 16:19
pre-profits [1] - 13:24
pre-release [1] - 56:16
```

pre-releases [1] - 56:9 pre-revenue [1] - 44:8 pre-units [1] - 80:15 precise [3] - 50:2, 57:22, 120:19 predicting [1] - 57:10 predictions [1] - 13:11 premise [1] - 73:6 premised [2] - 61:18, 61:22 prepare [1] - 60:6 prepared [24] - 3:16, 4:3, 4:20, 12:6, 12:17, 12:19, 13:16, 13:17, 14:6, 14:9, 53:5, 53:21, 53:23, 54:13, 68:16, 80:23, 81:4, 81:7, 82:10, 82:15, 83:10, 86:16, 87:9, 110:8 preparing [5] - 52:8, 54:10, 54:17, 84:21, 112:21 preproduction [1] -55:25 present [11] - 18:14, 18:23, 18:24, 19:1, 27:11, 27:22, 28:11, 29:11, 41:8, 70:2, 70:3 presentation [5] -53:25, 83:2, 85:5, 101:11, 102:12 presented [9] - 12:18, 12:19, 32:21, 33:13, 36:2, 53:2, 80:24, 81:2, 123:25 president [9] - 80:24, 80:25, 82:19, 87:15, 98:11, 98:12, 99:6, 101:11, 102:13 President [2] - 12:21, 112:17 president's [7] -53:20, 53:23, 53:25, 54:9, 54:12, 85:6 pressure [1] - 111:19 presuming [1] - 115:7 pretty [1] - 31:25 preventing [1] - 7:12 previous [6] - 12:25, 24:16, 51:6, 57:24, 85:10, 103:14 previously [5] - 6:22, 15:9, 24:11, 49:5, 107:19 Price [1] - 86:10 price [96] - 7:22, 15:19, 16:20, 17:2,

32:10, 32:13, 35:8, 35:12, 35:15, 35:16, 35:19, 36:6, 37:13, 37:20, 39:2, 39:6, 39:11, 39:12, 39:18, 39:23, 39:25, 40:4, 40:6, 40:9, 40:10, 40:11, 40:18, 41:17, 41:21, 41:23, 42:10, 42:16, 42:20, 43:2, 43:4, 43:16, 43:19, 44:5, 44:6, 44:7, 44:11, 44:20, 44:23, 44:25, 45:9, 45:22, 46:1, 46:6, 46:9, 46:25, 47:20, 47:25, 48:5, 48:6, 48:8, 48:12, 48:22, 49:6, 49:8, 49:9, 50:16, 56:19, 56:20, 57:14, 58:2, 58:9, 59:13, 59:16, 62:23, 63:23, 74:19, 75:4, 79:7, 79:12, 79:16, 80:18, 81:7, 82:3, 85:5, 85:23, 86:1, 89:13, 90:21, 93:7, 93:15, 94:13, 95:2, 96:22, 97:4, 104:7, 122:20 price-fixing [2] - 17:2, 90:21 priced [2] - 50:22, 58:22 prices [67] - 7:20, 7:22, 8:1, 15:1, 15:21, 15:25, 16:1, 16:5, 16:20, 17:3, 18:5, 18:6, 18:8, 18:9, 18:10, 24:11, 30:24, 31:3, 31:4, 31:5, 31:9, 31:16, 31:18, 31:22, 32:1, 32:4, 35:24, 36:1, 36:2, 36:4, 37:22, 40:14, 42:21, 42:22, 43:10, 45:3, 48:13, 48:17, 49:20, 49:22, 58:19, 63:1, 74:22, 85:8, 85:17, 85:18, 86:1, 86:4, 93:14, 120:12, 120:24, 121:14, 121:15, 121:16, 121:20, 121:21, 121:25, 122:1, 122:2, 122:6, 122:10, 122:15 pricing [5] - 61:19, 78:9, 80:13, 94:14, 98:5 primarily [2] - 32:21,

33:1 primary [20] - 15:22, 17:4, 22:21, 36:4, 90:1, 90:5, 90:10, 90:12, 91:5, 92:18, 92:24, 93:21, 93:24, 94:6, 98:8, 100:3, 101:3, 102:7, 107:23, 107:24 problem [2] - 113:24, 120:1 problems [22] -101:16, 105:8, 105:17, 105:24, 106:2, 107:2, 107:20, 108:12, 109:17, 109:19, 113:19, 113:21, 114:10, 114:13, 114:22, 114:24, 115:20, 119:6, 119:15, 119:20, 119:21 procedure [1] - 65:17 procedures [2] - 53:6, 113:22 proceed [3] - 3:7, 3:19, 112:10 proceedings [2] - 3:3, 88:10 process [3] - 77:1, 83:24, 84:4 processing [1] -113:22 produce [3] - 13:7, 33:3, 39:1 produced [3] - 33:17, 35:25, 36:1 producing [2] - 26:8, 27:25 Product [2] - 54:21, 56:1 product [22] - 17:22, 18:1, 40:1, 41:7, 51:9, 55:15, 55:19, 56:4, 57:5, 57:22, 60:4, 65:11, 86:5, 93:12, 103:5, 104:19, 107:16, 114:14 product-by-product [1] - 86:5 production [3] - 7:9, 32:24, 56:16 products [21] - 17:13, 17:14, 18:2, 18:5, 26:9, 26:12, 44:11, 49:16, 50:5, 51:14, 55:1, 55:17, 58:1,

24:22, 27:25, 32:5,

58:7, 58:8, 58:22,

84:13, 89:13, 107:13, 111:5 professionals [1] -12:20 profit [40] - 10:15, 10:23, 12:9, 15:4, 15:11, 15:14, 15:24, 16:19, 16:25, 17:1, 17:5, 18:12, 23:2, 23:7, 23:11, 23:16, 24:21, 27:19, 36:5, 61:4, 61:13, 61:16, 61:20, 61:24, 61:25, 62:8, 62:11, 63:13, 64:8, 64:12, 64:18, 64:22, 65:6, 65:24, 66:9, 72:6, 77:4, 80:15 profit-generating [1] -77:4 profitability [18] -23:16, 23:24, 24:4, 25:24, 65:2, 65:7, 66:8, 66:17, 69:3, 69:6, 71:1, 71:5, 72:17, 73:3, 73:4, 80:6, 80:13 profitable [2] - 70:18, 70:21 profits [76] - 9:13, 9:18, 9:20, 10:1, 10:9, 10:11, 10:12, 10:17, 10:22, 11:3, 11:5, 11:13, 13:12, 13:20, 13:24, 14:1, 15:5, 15:6, 15:9, 17:5, 18:18, 21:4, 22:10, 22:21, 23:17, 23:18, 23:24, 23:25, 25:1, 25:2, 25:22, 30:8, 30:16, 31:14, 31:15, 36:5, 37:4, 42:6, 60:1, 60:11, 60:17, 62:8, 64:6, 64:18, 64:22, 65:10, 65:15, 65:22, 66:1, 66:4, 66:13, 66:19, 66:20, 68:1, 68:2, 68:21, 68:25, 69:1, 69:4, 69:7, 69:8, 69:13, 69:17, 69:21, 70:5, 71:11, 72:13, 72:16, 73:21, 73:24, 78:5, 78:6, 119:20, 119:23 projected [9] - 14:14, 15:1, 15:25, 20:22, 20:24, 22:8, 27:1, 51:12, 102:20

15:5, 15:13, 15:17, 33:2, 38:13, 50:3, 51:16, 97:14, 103:18 projects [1] - 40:20 promise [4] - 36:24, 51:1, 52:7, 120:20 proposed [1] - 5:16 proven [1] - 13:16 provide [15] - 6:24, 11:14, 11:20, 21:21, 29:9, 31:16, 45:23, 50:12, 51:8, 57:21, 65:18, 67:24, 85:7. 85:22, 101:1 provided [13] - 4:24, 20:15, 26:12, 29:1, 31:21, 38:19, 44:18, 45:12, 46:17, 46:19, 47:21, 50:3, 50:4 provides [13] - 13:13, 19:12, 19:15, 19:20, 21:19, 23:1, 24:17, 35:12, 35:13, 45:10, 59:3, 65:21 provision [2] - 104:6, 120:15 provisions [4] - 90:14, 90:16, 91:2, 92:1 proxy[3] - 37:21, 52:1, 52:14 public [1] - 26:6 publicly [5] - 25:18, 25:19, 26:10, 26:20, 74:12 publisher [1] - 28:6 publishes [1] - 28:6 pull [1] - 101:22 purchase [2] - 45:11, 92:11 purchasers [1] - 47:10 purchases [2] -101:15, 113:19 purpose [5] - 19:11, 66:19, 71:13, 98:24, 108:10 purposes [12] - 5:3, 15:23, 19:12, 24:20, 37:21, 53:12, 58:16, 71:10, 97:11, 123:6, 124:1 push [1] - 103:7 put[12] - 3:15, 4:1,

projection [1] - 99:21

projections [10] -

pyramid-shaped [1] 119:8

Q

qua [1] - 7:23
qualitative [2] - 97:8,
115:25
quality [14] - 84:13,
89:16, 94:11,
101:16, 103:5,
104:19, 114:16,
115:8, 115:9,
115:10, 115:11,
115:12, 119:6
quantities (1) 116:1

116:1 quantities [1] - 47:17 quantity [2] - 58:10, 119:9 questioning [2] - 3:12, 16:11

questions [6] - 3:18, 30:2, 98:18, 123:11, 123:12, 124:5 quick [2] - 3:15, 111:13 quicker [1] - 39:9

quickly [1] - 113:3 quite [4] - 26:5, 70:4, 82:13, 93:4

R

R-squared [1] - 20:8 raising [1] - 7:7 range [13] - 11:15, 11:25, 12:14, 12:15, 26:25, 42:23, 45:23, 46:2, 46:10, 47:2, 49:11, 69:12, 69:21 rate [6] - 18:24, 27:24,

rate [6] - 18:24, 27:2 28:2, 28:10, 70:3, 72:13 rates [5] - 27:14,

27:15, 97:23, 98:3 rather [4] - 23:15, 24:3, 36:18, 73:1

rating [1] - 51:12 ratings [3] - 39:4, 50:19, 51:12

117:9, 119:16

real [1] - 124:15

reading [1] - 67:13

ratio [2] - 14:7, 65:14 reach [1] - 9:6 reached [1] - 98:25 read [6] - 63:10, 82:3, 96:16, 112:20,

113:22 putting [1] - 68:2 pyramid [1] - 119:8

really [6] - 30:13, 40:4, 113:3, 113:15, 123:14, 124:14 reason [3] - 11:4, 17:7, 24:14 reasonable [17] -11:16, 11:18, 12:2, 16:23, 18:25, 26:5, 26:13, 26:22, 27:17, 29:2, 52:4, 52:16, 61:20, 61:24, 78:6, 99:1 reasonableness [6] -15:17, 19:13, 36:7, 52:12, 53:10, 83:20 reasons 131 - 83:12. 99:23, 100:2 **REATH** [1] - 1:18 rebate [1] - 120:24 Rebates [1] - 44:14 rebates [12] - 41:23, 44:15, 45:10, 45:12, 45:13, 45:22, 46:6, 46:8, 47:24, 120:16, 120:24 rebuilds [1] - 40:24 receive [1] - 59:11 receiving [1] - 47:16 recent [2] - 74:10, 74:16 recess [2] - 88:8, 88:10 recessed [1] - 125:2 recognize [4] - 54:8, 77:19, 77:20, 103:19 recognizing [1] -103:22 record [4] - 5:21, 13:17, 39:24, 98:18 records [1] - 101:4 recovers [1] - 76:20 RECROSS [1] -125:12 redirect [2] - 29:23, 123:4 REDIRECT [1] -

125:12

103:15

redoing [1] - 57:3

reduced [2] - 83:14,

reducing [1] - 86:1

85:7, 94:12

reduction [6] - 9:15,

refer [4] - 18:9, 21:1,

reference [1] - 86:22

referenced [1] - 94:20

referencing [1] - 62:17

43:15, 113:23

31:20, 84:15, 85:4,

reduce [1] - 46:6

referred [2] - 27:8, 43:16 referring [1] - 102:1 refers [1] - 90:25 reflect [2] - 30:17, 77:22 reflecting [1] - 68:14 reflection [2] - 48:19, 114:1 reflects [1] - 37:17 regard [9] - 5:14, 6:15, 8:24, 11:12, 13:18, 31:13, 31:16, 84:12, 123:22 regarding [2] - 50:5, 111:3 REID [1] - 2:9 reintroduced [1] -56:5 relates [1] - 115:13 relative [8] - 12:25, 25:20, 25:21, 85:10, 85:18, 95:2, 96:22, 115:8 release [1] - 56:16 released [2] - 55:20, 114:12 releases [1] - 56:9 relevant (4) - 5:2. 5:18, 32:23, 97:16 reliability [4] - 36:12, 44:3, 53:11, 123:8 reliable [8] - 13:15, 15:13, 19:25, 20:2, 39:16, 60:21, 80:10, 124:2 relied [8] - 12:5, 53:15, 53:20, 53:23, 54:9, 54:16, 82:10, 82:15 rely [2] - 19:2, 23:10 relying [1] - 23:15 remaining [1] - 112:25 remember [1] - 53:22 removal [2] - 31:20, 111:19 remove [1] - 93:10 removing [1] - 93:11 repairs [1] - 40:23 report [83] - 4:20, 4:23, 6:14, 9:16, 11:6, 14:1, 14:12,

16:2, 17:13, 17:16,

17:23, 18:8, 18:17,

20:11, 22:13, 25:5,

27:9, 28:18, 29:8,

29:16, 33:23, 34:5,

34:6, 34:10, 34:19,

34:20, 35:9, 35:21,

18:21, 18:23, 18:24,

07/23/2009 12:14:13 PM

projecting [1] - 57:7

112:2, 115:13,

118:18, 119:9,

119:14, 119:19,

120:11, 121:4,

121:11, 121:19,

Sales [1] - 112:17

satisfy [2] - 15:12,

saw [1] - 32:25

122:19

20:2

115:16, 115:23,

15

36:16, 36:21, 36:22, 42:13, 45:6, 45:14, 46:16, 49:1, 53:20, 53:21, 54:9, 54:10, 54:12, 54:16, 54:17, 66:2, 70:13, 71:12, 71:15, 71:20, 71:21, 75:6, 85:6, 85:7, 86:7, 87:7, 87:17, 87:23, 88:25, 89:5, 90:6, 91:8, 91:17, 94:16, 99:1, 100:13, 100:17, 101:1, 101:20, 102:2, 104:5, 104:20, 104:23, 105:16, 110:8, 110:11, 112:21, 114:6, 114:7, 123:8, 124:12 reported [1] - 109:14 Reporter [1] - 1:24 reports [5] - 53:23, 53:25, 60:5, 109:9, 111:1 represent [2] - 117:3, 117:18 representation [1] -69.18 representations [1] -45:17 representative [2] -116:18, 116:20 represents [1] - 37:6 request [3] - 81:3, 83:3, 87:10 required [1] - 124:11 requirements [3] -50:20, 58:25, 90:19 research [1] - 4:25 resolved [1] - 105:14 respected [1] - 28:6 respond [1] - 124:24 response [2] - 16:9, 16:14 rest [2] - 110:3, 124:17 result [10] - 7:11, 7:23, 11:11, 12:24, 23:8, 28:17, 32:5, 84:19, 116:10 resulted [3] - 7:7, 24:10, 28:24 resulting [1] - 114:23 results [6] - 11:15, 24:8, 38:16, 61:17, 64:16, 106:7 resumed [1] - 88:10 revenue [28] - 17:16,

39:21, 40:11, 42:5, 43:17, 44:8, 58:13, 59:11, 63:6, 63:18, 63:20, 76:6, 77:3, 81:10, 82:6, 82:11, 85:2 revenues [18] - 17:18, 35:13, 39:22, 40:1, 40:19, 40:23, 40:25, 41:3, 41:6, 43:11, 44:10, 48:9, 49:14, 50:11, 56:11, 58:3, review [4] - 4:24, 47:1, 107:7, 107:9 reviewed [6] - 6:6, 12:14, 26:21, 51:5, 81:2, 81:5 revise [3] - 13:6, 103:18 revised [7] - 12:25, 13:1, 83:1, 83:2, 84:13, 84:14, 86:12 Rick [2] - 12:21, 98:10 rise [1] - 6:21 risk [3] - 18:19, 18:23, 70:3 risk-free [2] - 18:19, 70:3 rivals' [1] - 7:7 **ROBINSON** [1] - 1:14 rough [1] - 9:25 row [1] - 38:10 Rule [1] - 123:6 running [1] - 8:2 runs [2] - 55:8, 55:12 Ryder[4] - 84:15, 101:13, 101:14, 103:5 Ryder's [1] - 101:14

# S

sale [5] - 40:20, 41:4, 55:24, 71:18, 113:9 sales [50] - 8:17, 10:23, 14:20, 17:5, 20:21, 21:2, 21:3, 25:21, 40:23, 41:10, 48:9, 49:14, 50:10, 50:12, 56:22, 69:16, 81:12, 82:7, 82:8, 82:9, 84:16, 88:22, 89:7, 89:12, 92:20, 94:12, 96:21, 99:13, 103:6, 103:7, 106:1, 107:1, 107:22, 108:14, 109:16, 111:8, 111:24,

say-so [1] - 6:8 scan [1] - 111:13 scanned [1] - 113:2 scenarios [1] - 75:14 scenes [1] - 86:3 schedule [1] - 39:25 science [2] - 123:9, 124:3 screen [3] - 36:18, 38:7, 89:3 screening [1] - 14:24 scroll [2] - 101:23. 110:19 se [1] - 16:20 second [10] - 7:5, 9:14, 15:15, 36:11, 42:8, 60:9, 60:22, 61:18, 109:8, 120:21 secondary [3] - 92:19, 93:22, 94:8 Section [2] - 66:3, 91:20 section [7] - 11:6, 20:11, 66:2, 89:5, 89:9, 92:2, 94:10 see [29] - 37:25, 43:17, 45:2, 47:1, 50:11, 51:16, 51:19, 54:23, 54:24, 55:2, 60:12, 80:8, 86:14, 86:15, 93:4, 93:7, 94:5, 106:15, 107:11, 108:17, 108:24, 108:25, 110:4, 114:18, 115:1, 118:16, 119:5, 123:17 seeing [1] - 116:6 segment [2] - 66:4, 66:21 selected [2] - 22:25, 42:19 sell [11] - 32:16, 40:11, 49:22, 58:11, 59:7, 59:18, 73:9, 76:18, 76:19, 85:23, 106:11 sellers [1] - 77:20 selling [6] - 32:6, 32:10, 32:14, 49:9,

76:15, 77:6 semblance [1] - 76:21 senior [1] - 110:25 sense [3] - 30:17, 58:19, 76:17 sensitive [1] - 36:5 sent [5] - 80:25, 86:18, 87:4. 87:13 separate [13] - 10:20, 17:12, 18:22, 19:20, 32:23, 34:24, 61:7, 119:13, 119:19, 120:11, 121:3, 121:19, 122:18 separated [1] - 50:9 separately [1] - 15:21 September [2] - 55:9, 55:13 seriously [1] - 44:2 serve [1] - 19:11 serves [1] - 19:12 set [9] - 26:15, 26:22, 29:3, 44:10, 74:24, 80:6, 80:7, 84:7, 111:1 sets [1] - 26:15 seven [2] - 6:17, 103:3 several [7] - 19:12. 74:9, 85:8, 92:4, 104:1, 116:10 severe [2] - 77:20, 114:18 shall [2] - 34:6, 88:4 shaped [1] - 119:8 SHAPIRO [1] - 2:2 share [48] - 7:13, 13:22, 14:14, 15:17, 20:22, 23:2, 23:23, 24:7, 38:7, 38:9, 38:13, 60:23, 61:5, 61:8, 67:14, 68:8, 79:24, 80:12, 83:8, 84:11, 88:23, 89:7, 89:13, 90:18, 91:3, 91:11, 91:14, 92:6, 92:20, 94:14, 96:20, 97:25, 100:5, 100:14, 100:18, 100:21, 101:5, 101:9, 102:8, 102:11, 102:14, 102:20, 104:9, 108:1, 114:19, 114:23, 115:3, 119:14 shares [12] - 13:11, 14:8, 19:9, 19:14, 20:16, 20:24, 24:9,

36:13, 68:4, 79:22,

91:14, 106:3

sharp [1] - 114:20 sheet [2] - 68:12, 80:16 sheets [4] - 53:5, 57:4, 58:13, 84:2 Shift [3] - 38:24, 55:19, 81:13 shift [3] - 103:7, 114:12, 114:13 short [2] - 88:8, 88:10 shorthand [3] - 37:17, 40:6, 40:8 show [3] - 105:21, 108:17, 116:16 showed [2] - 20:15, 58:24 showing [1] - 98:17 shown [1] - 117:8 shows [5] - 24:14, 83:2, 100:17, 118:5, 122:17 side [1] - 55:3 significance [3] -94:4, 94:5, 110:1 significant [30] - 8:17, 11:7, 11:10, 19:18, 20:12, 33:17, 35:3, 64:14, 66:11, 84:15, 89:25, 90:4, 91:2, 94:2, 98:8, 101:13, 101:14, 104:23, 105:4, 105:8, 107:17, 107:20, 108:16, 109:22, 110:2, 111:16, 111:18, 111:19, 118:16, 119:7 significantly [6] -15:10, 20:16, 70:7, 70:8, 83:15, 118:15 similar [2] - 42:8, 109:21 simple [2] - 31:25, 93:20 simply [9] - 22:23, 24:9, 39:6, 53:8, 57:16, 64:2, 71:19, 73:18, 118:19 sine [1] - 7:23 single [2] - 11:20, 52:11 sit[1] - 34:1 sitting [1] - 124:7 **situation** [1] - 103:2 six [1] - 6:16 sixth [1] - 8:14 size [3] - 14:5, 47:3, 100:7 slide [1] - 68:5 slides [1] - 4:4

35:14, 37:7, 37:17.

39:5, 39:6, 39:15,

37:18, 37:19, 37:20,

tie [2] - 15:7, 120:2 tied [2] - 28:16, 82:21 ties [1] - 43:18 Timetable [2] - 54:22, 56:1 timetable [2] - 54:25, 56:13 timing [1] - 55:24 title [4] - 44:13, 45:20, 47:14, 110:23 titles [1] - 112:19 today [4] - 34:2, 77:13, 123:6, 123:10 together [1] - 91:15 Tom [1] - 110:21 tomorrow [3] - 76:14. 76:22, 76:24 took [16] - 14:3, 14:7, 22:7, 22:11, 25:7, 60:19, 66:19, 79:13, 79:16, 79:19, 79:22, 81:18, 83:4, 97:22, 106:20, 108:18 top [4] - 44:13, 54:12, 54:21, 109:8 topics [1] - 88:20 torque [6] - 32:6, 39:4, 50:19, 51:12, 58:25 total [20] - 10:1, 10:2, 14:4, 14:16, 33:24, 34:23, 37:18, 38:6, 40:1, 43:11, 47:16, 47:17, 59:12, 59:22, 67:7, 80:1, 84:9, 98:2, 106:20, 116:9 towards [1] - 103:7 track [1] - 13:17 tractors [1] - 110:18 traded [5] - 25:19, 26:6, 26:11, 26:20, 74:12 transaction [1] - 43:10 transactions [1] -42:19 transcript [1] - 95:19 TRANSMISSION [1] -1:5 Transmission [2] -3:9, 86:9 transmission [35] -32:22, 33:9, 34:14, 34:15, 34:23, 35:9, 35:19, 35:20, 39:1, 39:7, 39:13, 40:24, 59:23, 96:21, 96:23, 99:12, 105:24, 107:21, 108:22, 109:10, 109:16, 111:4, 111:9, 113:19, 113:21,

117:15, 117:19, 118:2, 120:12, 121:21, 122:3, 122:10, 122:20 Transmissions [1] -107:20 transmissions [96] -7:10, 11:2, 32:7, 32:11, 32:14, 32:16, 32:23, 32:25, 33:4, 33:7, 33:10, 33:18, 33:20, 33:24, 33:25, 34:25, 35:4, 37:14, 38:1, 38:11, 39:3, 39:4, 40:21, 41:11, 42:4, 42:17, 42:19, 44:23, 45:1, 45:4, 45:11, 46:14, 48:6, 48:13, 48:23, 49:10, 49:17, 49:18, 49:21, 49:22, 49:24, 50:17, 50:22, 50:25, 51:4, 51:16, 51:21, 53:16, 56:20, 56:23, 56:25, 57:6, 57:13, 57:16, 57:17, 58:11, 58:20, 58:21, 58:23, 59:1, 59:6, 59:7, 59:12, 59:19, 65:11, 65:20, 67:22, 68:3, 68:15, 79:7, 79:13, 79:16, 79:19, 81:12, 84:18, 84:24, 89:17, 95:3, 97:5, 97:8, 100:11, 103:8, 104:8, 105:5, 105:18, 107:18, 109:21, 111:10, 119:7, 120:25, 121:5, 122:16, 122:22 transmittal [1] - 87:4 Transportation [3] -110:12, 110:17, 111:24 treat [1] - 91:15 tremendous [1] -114:13 trial [2] - 98:23, 124:7 truck [16] - 14:16. 41:24, 45:10, 46:13, 46:18, 46:25, 47:3, 47:6, 47:10, 47:20, 47:24, 47:25, 79:24, 80:1, 98:2, 112:25 Truck [1] - 112:14 trucks [5] - 14:13, 14:19, 20:25, 38:6, 38.9 true [1] - 29:5

try [3] - 52:20, 59:10,

123:19 trying [4] - 46:5, 72:9, 113:5, 120:2 Tuesday [1] - 1:12 **TUNNELL** [1] - 2:9 turn [6] - 12:3, 36:16, 38:10, 62:4, 66:17, 115:13 turnover[1] - 103:6 two [16] - 9:11, 14:7, 26:4, 26:14, 28:3, 38:19, 43:8, 69:20, 70:8, 70:9, 70:10, 70:25, 71:4, 88:4, 106:12, 121:23 type [4] - 9:7, 57:22, 90:16 types [6] - 9:7, 9:11, 58:1, 59:6, 65:11, 91:8 typically [1] - 11:24

# U

**U.S** [1] - 26:18 U.S.D.C.J [1] - 1:14 ultimate [2] - 17:1, 17:6 ultimately [14] - 11:9, 17:21, 19:2, 23:3, 33:5, 58:14, 62:21, 68:9, 69:16, 109:22, 113:15, 115:10, 120:14, 121:9 uncertainty [1] - 11:12 unclear [1] - 115:9 under [8] - 20:21, 46:2, 61:4, 69:5, 82:18, 117:14, 117:15, 123:6 underlying [10] -13:18, 33:14, 53:9, 58:12, 60:4, 67:19, 73:2, 73:21, 84:2 understandable [1] -3:15 understood [1] - 5:23 undertaken [1] - 89:24 unfair [1] - 98:21 unit [40] - 10:23, 12:9, 15:4, 15:5, 15:6, 15:8, 15:11, 15:24, 16:20, 20:21, 21:2, 21:3, 21:4, 23:6, 23:11, 24:4, 31:14, 31:15, 36:5, 37:20, 39:15, 39:21, 43:17, 47:9, 47:21, 47:25, 48:20, 58:13, 61:24,

81:10, 85:23, 106:20, 116:7, 116:13, 118:14, 118:17 UNITED [1] - 1:1 units [29] - 10:12, 10:15, 11:1, 12:9, 14:2, 14:3, 35:14, 37:19, 38:4, 38:5, 38:13, 38:14, 40:2, 48:20, 51:9, 57:22, 59:18, 59:22, 66:22, 67:21, 80:15, 82:5, 83:11, 84:23, 106:4. 106:10, 106:16, 106:17, 107:4 unknown [2] - 58:10, 81:4 unless [1] - 56:16 unnecessary [2] -22:14, 35:11 unrelated [6] - 9:23, 14:20, 14:22, 14:23, 36:14, 76:7 unreliable [1] - 24:17 up [48] - 4:7, 4:13, 9:14, 17:11, 18:10, 18:16, 36:18, 36:22, 36:24, 41:18, 44:5, 44:13, 45:20, 51:20, 54:21, 58:2, 58:4, 58:5, 60:20, 63:3, 64:1, 65:4, 71:18, 71:22, 75:8, 78:20, 78:24, 82:5, 83:12, 85:14, 87:25, 89:2, 94:17, 95:13, 96:13, 96:15, 101:21, 101:22, 107:5, 109:2, 109:8, 110:10, 110:11, 110:19, 111:1, 112:11, 112:12, 120.2 update [1] - 83:20 useful [1] - 4:4 utilized [1] - 24:25

Valerie [1] - 1:24 valuable [1] - 8:10 valuation [14] - 25:25, 27:9, 27:12, 28:11, 28:19, 28:24, 72:11, 73:11, 73:13, 73:15, 76:1, 76:2, 77:19 valuations [5] - 26:13, 74:21, 77:22, 78:1, 78:7

value [50] - 9:15, 9:16, 10:1, 11:19, 18:14, 18:15, 18:22, 18:23, 18:24, 19:1, 22:22, 25:8, 25:11, 25:12, 25:19, 27:3, 27:4, 27:10, 27:11, 27:16, 27:22, 28:11, 29:11, 30:16, 41:8, 53:9, 60:18, 70:2, 70:3, 70:11, 70:13, 70:14, 70:24, 70:25, 71:3, 71:9, 71:14, 71:15, 71:24, 72:2, 72:10, 73:23, 74:18, 75:16, 76:12, 76:13, 76:23, 77:3, 116:13 values [3] - 42:3, 75:15, 116:15 valuing [2] - 77:2 variable [13] - 13:25, 17:1, 17:6, 23:4, 23:6, 59:25, 60:3, 61:19, 95:1, 96:21, 97:13, 97:24, 97:25 variables [4] - 19:10, 94:23, 97:20, 98:2 variance [2] - 22:18, 102:19 Variance [1] - 86:10 variant[1] - 22:20 varied [1] - 47:3 variety [2] - 19:9, 20:4 various [13] - 7:2. 13:8, 28:7, 33:9, 38:25, 60:19, 80:4, 84:18, 84:19, 89:24, 92:1, 101:18, 102:6 venture [11] - 21:17, 26:10, 98:11, 98:12, 99:7, 99:12, 102:13, 110:21, 112:18, 113:13, 113:16 ventures [1] - 71:1 verifiable [1] - 6:7 verification [1] - 15:1 verified [6] - 15:3, 15:4, 15:8, 36:12, 48:21, 80:16 verify [6] - 16:21, 23:5, 52:11, 53:6, 53:10, 106:7 versions [2] - 4:15, 87:2 versus [6] - 31:5, 34:25, 47:16, 59:4,

67:8, 119:15

Vice [1] - 112:17

117:10, 118:6

videotape [3] - 99:25,

Videotaped [1] -116:23 videotaped [2] - 99:9, 117:12 view [3] - 65:24, 68:14, 77:15 Vogel [1] - 111:1 Volume [1] - 86:10 volume [13] - 33:20, 35:20, 58:7, 61:8, 61:9, 79:19, 81:7, 83:4, 83:5, 83:7, 83:14, 84:15, 106:20 volumes [7] - 36:8, 36:9, 36:14, 56:2, 78:10, 82:22, 83:9 vs [1] - 1:7

# W

wagon [1] - 49:12 wait [3] - 76:20, 106:9, 125:1 walk [3] - 20:20, 36:24, 112:12 warranties [2] -118:10, 118:17 warrants [1] - 117:4 warranty [35] - 104:24, 105:4, 105:8, 105:19, 106:2, 107:11, 107:13, 107:24, 113:22, 114:11, 114:13, 114:16, 114:22, 115:20, 115:22, 116:4, 116:7, 116:10, 116:20, 116:25, 117:15, 117:19, 118:2, 118:8, 118:17, 118:21, 119:5, 119:6, 119:11, 119:15, 119:20, 119:21, 120:5, 120:6 Washington [2] - 2:5, 2:14 water [1] - 87:25 ways [8] - 11:5, 11:14, 22:23, 28:17, 60:11, 60:14, 97:11, 123:20 weighted [1] - 18:5 welcome [1] - 79:4 well-respected [1] -28:6 whole [3] - 77:23, 100:3, 120:17

77:15 Wilmington [1] - 1:11 witness [6] - 4:10, 54:3, 79:2, 95:20. 95:23, 109:4 WITNESS [11] - 40:5, 40:13, 40:19, 41:5, 41:14, 47:14, 81:24, 91:23, 106:15, 113:7, 125:12 Witness [1] - 124:10 witness) [1] - 54:5 witnesses [2] - 98:10, 98:19 Wolfgang [2] - 111:1, 111:3 wondering [1] - 82:14 WOOD [1] - 2:5 words [6] - 3:20, 67:16, 68:7, 68:16,

68:18, 79:11 world [61] - 10:13, 11:3, 11:12, 11:14, 30:11, 30:17, 30:19, 30:20, 30:21, 30:23, 30:24, 32:6, 32:11, 32:14, 32:17, 32:24, 33:21, 34:14, 35:4, 50:1, 51:3, 51:20, 51:23, 52:2, 52:15, 52:20, 53:16, 57:11, 57:12, 58:10, 59:5, 61:11, 64:11, 64:13, 64:21, 65:20, 66:8, 66:14, 67:1, 67:2, 67:9, 68:10, 71:17, 72:7, 73:7, 77:5, 78:9, 80:2, 105:25, 106:1, 106:11, 108:3, 111:7, 111:9, 113:12, 118:11, 118:22, 119:1, 119:3, 121:9 worse [2] - 117:7, 117:23 worth [2] - 69:4, 124:21

# Υ

write [2] - 75:22, 75:23

wrote [2] - 59:14,

75:19

year [52] - 29:5, 29:6, 29:9, 32:17, 33:22, 34:19, 37:24, 39:14, 39:19, 41:6, 41:9, 41:18, 42:22, 43:3, 45:2, 47:19, 49:25, 53:17, 55:5, 55:8,

55:9, 55:11, 55:17, 55:22, 56:5, 56:6, 56:15, 56:18, 57:14, 63:3, 66:16, 74:10, 74:17, 83:11, 104:13, 104:14, 104:15, 106:11, 109:12, 117:4, 117:16, 117:19, 117:20, 118:1, 118:3

years [10] - 22:11, 29:13, 68:6, 74:9, 75:11, 76:8, 77:9, 78:1

yourself [0] - 15:12, 20:2, 123:13

# Z

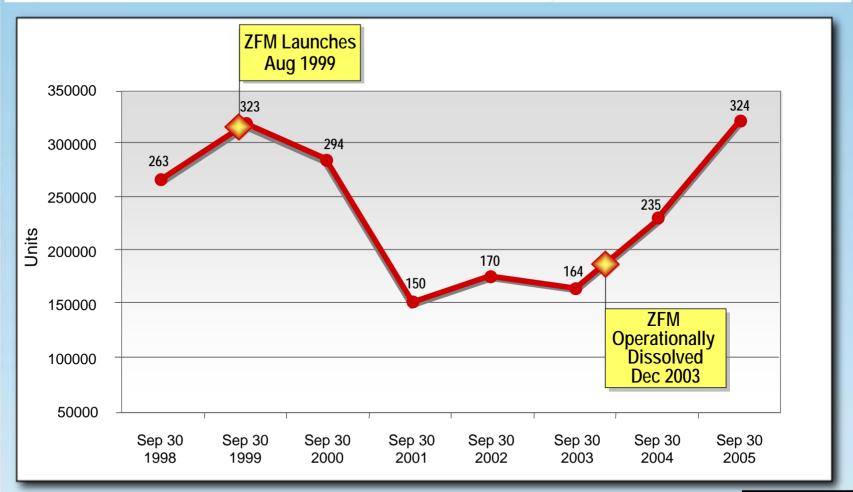
zero [3] - 102:11, 106:16, 107:4 ZF [99] - 1:4, 3:9, 5:4, 7:10, 8:17, 9:13, 9:16, 9:21, 10:13, 11:9, 11:13, 12:6, 12:21, 13:22, 14:5, 14:19, 17:4, 19:9, 19:18, 21:2, 21:14, 21:16, 22:10, 23:22, 25:23, 26:10, 27:2, 27:18, 28:19, 28:20, 29:6, 31:22, 32:13, 32:16, 32:18, 32:24, 33:3, 33:16, 35:2, 35:20, 37:14, 38:6, 40:2, 40:20, 44:19, 46:19, 48:14, 48:17, 48:23, 50:3, 57:15, 64:20, 65:19, 66:7, 66:12, 66:13, 66:18, 67:4, 67:10, 67:14, 67:20, 68:4, 68:8, 68:25, 69:17, 69:18, 71:1, 71:4, 71:18, 72:7, 72:17, 73:4, 73:8, 78:5, 79:23, 83:18, 83:19, 86:9, 86:19, 87:5, 88:22, 91:14, 92:11, 96:20, 96:22, 97:24, 100:14, 101:10, 104:8, 107:19, 114:19, 115:11, 119:6, 121:16, 122:2, 122:3, 122:5 ZFM [5] - 36:1, 90:10, 93:12, 94:7, 105:4 ZFM's [7] - 36:8, 36:9, 93:2, 93:14, 105:17, 105:19, 108:1

wide [2] - 12:14, 12:15

willing [2] - 77:12,

# EXHIBIT 13

# North American Heavy-Duty Vehicle Production by Year



Source: DX 545, ArvinMeritor 2002 Annual Report DX 550, ArvinMeritor 2007 Annual Report

DX 722